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1. Introduction

Expenditure on education should be considered an investment in human capital, resulting in both monetary and non-monetary benefits not only to the individual recipient, but also to the society as a whole. Public schools constitute a central institution in the production of this human capital. While it is clearly impossible to measure all the outputs of an education system, it is generally accepted that a direct link exists between education, per-capita income, and social well-being. Certainly, the development of skilled individuals, the provision of an enlightened citizenry, the increase in labour productivity, and the growth of a tax base justify government investment in human resources. In addition to these benefits which accrue to society as a whole, education can enhance the lifetime utility of the individual recipient, creating greater enjoyment of leisure time and more appreciation of the physical and cultural environment.

The accepted principles of education finance appear simple enough on the surface. Adequate funds to provide the service must be raised in a manner that ensures taxpayer equity. These financial resources must then be allocated so that current standards of student equity are satisfied. Finally, the system must account in some acceptable fashion for both the inputs and the outputs of the educational process. The principles of equity and efficiency permeate both the expenditure and tax decisions, as school finance systems attempt to provide equality of educational opportunity and equality of fiscal opportunity at the same time. Competing forces and goals determine the actual level of spending for education: equity, adequacy of service, fiscal capacity, and the competing demands of other government supported programs. Some compromise or tradeoff is implicit in the financing of any public program; there are growing and urgent demands on the limited financial resources of government, and education must compete for its share of tax dollars. The competitive position of education for a share of public resources has become weaker, however, during the recent periods of declining enrollment, as social priorities shift from the young to the old. Education, with its long-term, diffuse benefits and its highly visible costs, is at a distinct disadvantage in this competitive arena.

It was in the context of this economic, social and political environment that the Finance team undertook its investigation of the provision of financial resources for the British Columbia school system. The major issues associated with the financing of public education, which emerged from the submissions to the Commission, related to the broad areas of funding, taxation and accountability. The past decade or so, with its periods of growth, recession, and recovery, has been a turbulent one for education finance. Parents, students, teachers, trustees, and taxpayers, through both written and verbal briefs, expressed a variety of concerns regarding both the adequacy and the stability of funding, the tax base for education, and the effective and efficient use of financial resources.

We begin our analysis by outlining briefly the system of education finance as it exists now in the province, by describing the pre-1982 system, and by pointing out those changes made in 1982 which had such an impact on the following years. In Chapter 3, we provide a profile of education spending and provincial economic performance for the past 12 years. Chapter 4 addresses the issues related to the raising of revenue for education, specifically in the area of property taxation. The adequacy and stability of funding is analyzed in Chapter 5, with emphasis on the fiscal framework, the sharing ratio, and collective bargaining. In Chapter 6, we examine the structures and processes in place to ensure that the public receives value for education, especially in terms of efficiency, effectiveness, and cost-effectiveness. The results of our in-depth survey of fifteen school districts is presented in this same chapter. The remaining concerns, the public funding of independent schools, capital grants, and demographic trends, are outlined briefly in Chapter 7, completing our investigation and analysis of the issues.

2. The System of Education Finance in British Columbia

2.A Introduction

This chapter provides an introduction to the essential features of education finance in British Columbia. Further detail on components of the financing system are provided in subsequent chapters as specific issues are examined.

Provincial responsibility for the provision of education dates back to the division of powers originally set out in the British North America Act at the time of Confederation, and this authority is confirmed in the Constitution Act of 1982. Public services such as education were deemed to be of a local nature and, therefore, assigned to the provinces in Section 93 of the BNA Act: "In and for each Province the Legislature may exclusively make laws in relation of Education..." The functions assigned to the provinces were not financially burdensome in 1867 and were not expected to become so. Public schooling was not compulsory at that time; parents were expected to pay for their children's education, so it is not surprising that the idea of a publicly-funded, universal system of education was undreamed of by the Fathers of Confederation.

Provincial jurisdiction over the provision of education brought with it the power to delegate some of this authority to local school boards. In 1872, British Columbia passed an "Act Respecting Public Schools," commonly called the "Free School Act," establishing a strong central authority which made grants to local school boards. These operating grants covered the full cost of schooling, including teachers' salaries, capital costs, and maintenance. The local boards were responsible for dispersing funds, maintaining buildings, and ensuring that schools were conducted according to provincial regulations.

Today the characteristics of public school finance in British Columbia are similar to those in most other jurisdictions in Canada and North America. The system attempts to achieve a balance between local and provincial control and to ensure an equitable distribution of funds to all districts, recognising differences in cost and ability to pay.

Locally elected school boards are responsible for raising and spending funds for public education. Each year they establish budgets to operate the schools in their district. School Boards have access to limited revenue sources of their own, principally local property taxation. The provincial government provides substantial grants to school boards to help compensate for their narrow revenue base and to assist them in funding a "core" education program. School boards raise locally all funds needed to cover the recognised cost of the "core" program, and any supplementary spending they wish to undertake. (see Figure 2.1—next page)

Provincial operating grants made in support of the "core" program are not evenly distributed between districts. They are allocated in such a way as to equalize the ability of all districts to provide a comparable standard of education, without resorting to unreasonable levels of taxation. Therefore, provincial grants vary from district to district according to differences in the cost of delivering the "core" program and the ability of school boards to raise funds.

Although the provincial government provides a large proportion of school funding, school boards have considerable discretion over the pattern of spending in their district. Salaries are negotiated locally between school boards and employee groups.

In addition to operating grants to school districts, the provincial government provides grants to help with capital spending and grants to homeowners to help offset school property taxation.

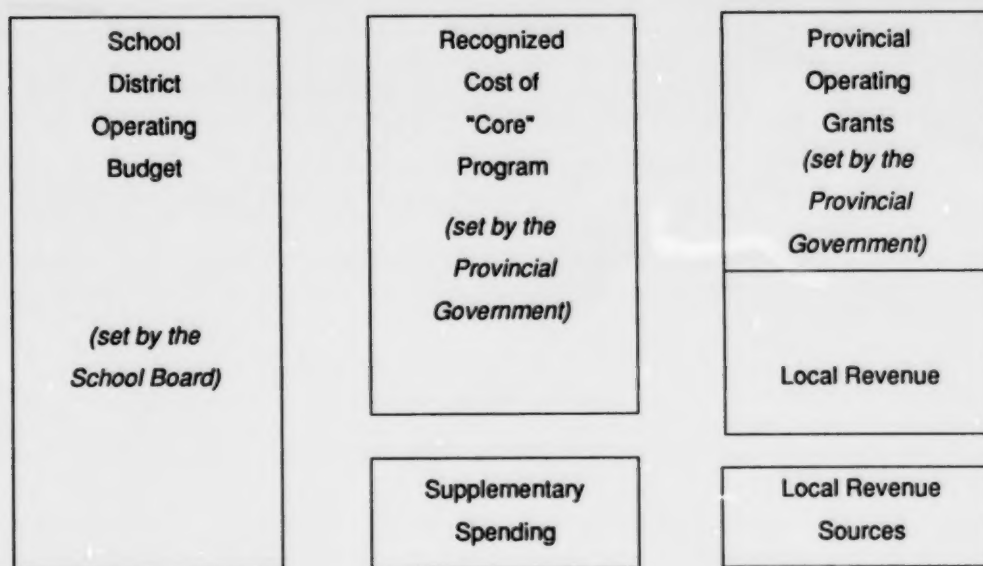


Figure 2.1 The Structure of Education Finance

2.B The pre-1982 Funding System

Prior to 1982, the system of financing elementary and secondary education in British Columbia followed a traditional "foundation" model, the key elements of which had been in place since 1968. An understanding of the pre-1982 system is important because of the number of submissions to the Commission have suggested a return to all or part of this system. Under the foundation plan, the recognized cost of the "core" program, known as the Basic Education Program (BEP), was derived from actual school district spending in the previous year, adjusted for enrolment changes.

Differences in the cost of the Basic Education Program between districts reflected differences in enrolment, the number of schools and local costs for transportation and special education. The provincial share of the BEP was equal to the difference between the cost of the BEP in a district and the amount that the district could raise through a uniform tax rate (the basic levy) set by the provincial government on all assessed property in the district. Government grants were funded out of provincial general revenue; the local share of funding came from taxes levied on both residential and non-residential property in the district. In addition, school boards could spend more than the cost of the BEP in any one year by levying a tax rate in excess of the basic levy. Total school board spending in any year formed the basis for the BEP in the following year.

2.C The 1982 Changes

In 1982, a number of important modifications were made to the system of education finance. Although the broad outline of a foundation program was retained, the main features were changed significantly. A new technique, the fiscal framework, was developed for setting the recognized cost of a "core" education program. The framework uses a combination of recognized service levels and cost factors to calculate a level of spending for each district that the provincial government is willing to help support through its operating grants.

The formula for setting the provincial contribution was also changed in 1982 to ensure that all districts receive a guaranteed minimum grant from the province. In addition, most districts receive a shared services grant which is calculated according to the district's ability to raise revenue locally. Furthermore, the provincial government assumed responsibility for the taxation of non-residential property, leaving school board taxation powers limited to residential property. The provincial government now levies a uniform tax rate on non-residential property. Revenue from this tax is used to help fund increased provincial grants. Figure 2.2 summarizes the main differences between the pre-1982 system and today's system.

Figure 2.2 Summary of Recent Changes to the Financing System

Characteristic	Pre-1982	Today
Recognized cost of "core" program Provincial/Local sharing ratio	Basic Education Program Basic Levy to set Local share	Fiscal Framework Basic Grant plus Shared Services Grant to set Provincial share
Provincial Revenue Sources	General Revenue	General Revenue plus Non-Residential Taxation
School Board Taxing Powers	Residential and Non-Residential Taxation	Residential Taxation only

The changes introduced in 1982 have been widely criticized largely because of the manner in which the new system was implemented. The changes were brought about suddenly and without prior consultation with the major stakeholders. This lack of dialogue resulted in a further criticism that the "rules of the game" were constantly changing, as the government proceeded to correct flaws in the original design. Also, the changes were introduced as part of the government's education restraint program—for example, the fiscal framework was used to set budget ceilings during the period when school board's spending powers were constrained. Therefore, the changes appeared to be a move on the part of the provincial government to increase its influence over both funding and spending decisions. In our analysis we have tried to distinguish between the essential features of the new funding system from the way the system was introduced and applied.

3. A Profile of Spending

3.A Introduction

In 1987/88, \$2.1 billion was spent on public education in B.C. The vast majority, 95%, was spent by school boards on operating and capital costs. The remainder was spent by the provincial government directly on a variety of support services including textbook acquisition and the government's contribution to the teachers' pension plan. This expenditure was financed from provincial grants (general revenue, homeowner grants plus non-residential taxation) and local revenue (residential taxation and miscellaneous revenue). In 1987/88, the provincial and local contributions to education spending can be broken down as in Table 3.1.

Table 3.1 Sources of Education Funds, 1987/88

	\$ (millions)	%
Provincial		
Grants to School Boards		
- General Revenue	832	39.9
- Non-residential taxation	447	21.4
Home Owner Grants	278	13.3
Direct Expenditures	117	5.6
School Boards		
Residential taxation	313	15.0
Other Revenues*	98	4.7
Total Spending	2,085	100.0

Note: Total spending includes all amounts spent by school boards (for both operating and capital), plus direct provincial expenditures for teacher pension contributions and textbook allocations.

* Includes grants of approximately \$40 million from the federal government for French language programs, Native Indian and DND student tuition fees.

Of the \$1.8 billion spent by school boards for operating purposes, 75% was spent on instruction, 5% on school district administration and 20% on other expenses such as building maintenance and transportation of pupils. Approximately 80% of school district spending is for the salaries and benefits of teachers and non-instructional staff.

Over the past twelve years total spending on public education has more than doubled. On a per pupil basis, spending has increased even faster—from \$1,757 per pupil in 1976 to \$4,425 per pupil in 1987/88—an increase of 152%. It is important to put these large increases in perspective. Inflation alone caused prices in general to increase by 107% during this period. The capacity of the economy to produce income—as measured by the Provincial Gross Domestic Product—also increased dramatically by 164% between 1976 and 1987. Hence, education spending per pupil has increased more quickly than inflation, but more slowly than the economy's capacity to support that spending.

We can better understand the trends in school district spending and government policies by dividing the period into three parts: 1976-1981—the Growth Years; 1982-1985/86—The Restraint Program; and, 1986/87 to 1988/89—Recovery.

3.B The Growth Years

During the late 1970s and early 1980s the provincial economy and government revenues grew rapidly. More resources were available for all public programs and education received a share of those resources. From 1976 to 1981 education spending per pupil increased by 88%, only slightly below the growth of the economy. (See Table 3.2).

Table 3.2 Education spending and economic performance in the late 1970s

Indicator	Percent Increases
	1976-1981
Gross Domestic Product	94
Personal income	100
Provincial government spending*	99
Consumer Price Index	55
Education spending/pupil	88
Education spending	76

* Covers fiscal years 1976/77 to 1981/82

Through access to additional funds School Boards were able to maintain and increase the number of teachers in the system even though school enrolment dropped by 6% over this period. However, the resulting reduction in the overall pupil-teacher ratio did not necessarily translate directly into smaller classes for three reasons. First, a shift in enrolment from elementary to secondary required an increase in staff simply to deliver the more varied secondary curriculum. Second, the policy of mainstreaming special education students was introduced during this period. These students require a much higher ratio of staff time than regular students. Finally, school boards allocated more teachers to administrative and support roles than ever before. The number of teachers in administrative roles increased by 40% between 1975 and 1981.

3.C The Restraint Program

After five successive years of buoyant growth the performance of the provincial economy faltered in mid-1981 as the impact of the world-wide recession made its influence felt in Western Canada. The major exporting sectors of the economy entered their worst period of decline since the 1930s. In the private sector the recession led to layoffs, prolonged unemployment and a restructuring of collective agreements. In the public sector the provincial government sought to make cost adjustments without eroding essential services.

In 1982, in its response to declining revenue the government introduced the first of a number of measures to restrain the growth of provincial spending. Public school education was identified as an area of particular concern because service levels had risen dramatically and spending increases were continuing at pre-recession levels. In introducing the program, the government pointed to a number of concerns with the trend of school spending during the late 1970s and early 1980s. Despite declining enrolment, the number of teaching positions had increased. As a result, the pupil-teacher ratio had fallen from 19.14 in September 1975 to 16.65 in September 1981.

However, spending on education was not out of line with other sectors of the economy during the 1970s, it was sharing in the growth of the economy. A large part of the concern about rising education costs can be attributed to the large salary settlements awarded to teachers in 1981 and 1982. In 1982, teachers' salary settlements averaged 17%. But even these settlements were not significantly out-of-line with settlements in the public and private sectors at that time. Other unionized groups, such as nurses and the woodworkers, had reached similar settlements in previous months. Indeed, the industrial aggregate showed that settlements in 1981 averaged 16% (see Table 3.3—next page).

Table 3.3 Negotiated Salary and Wage Increases

	1980	Annual Percent Increases		
		1981	1982	1983
IWA (journeyman)	9.5	18.5	13.0	0.0
Nurse (Class B, top)	22.5	12.3	8.8	3.2
Teachers (average)	9.6	12.8	17.3	3.3
All industries (first year increases)	12.9	16.3	10.7	3.0

Considered in context, teacher salary increases were not unreasonable. However, the timing of the increases was bad—teacher settlements peaked six months after most others and just as the full force of the recession was beginning to be felt.

In response to its concerns about uncontrolled spending the government implemented an education restraint program by:

- Removing discretionary taxing and spending powers from school boards.
- Introducing a new funding formula, the fiscal framework, for determining the acceptable spending level in each district.
- Using the compensation stabilization program to limit salary increases.

The stated objective of the restraint program was to reduce school district spending by \$80 million and thereby return to "levels of service much like those which prevailed in the mid-seventies." The restraint program was to be phased-in over three years so that school boards could adjust gradually to the new spending limits.

The impact of restraint on the school system, though significant, was not as great as originally intended. Following criticism of the program, the cutback targets were modified. As a result, spending per pupil remained virtually unchanged for three years and declined slightly in only one year. Table 3.4 illustrates the impact of restraint. Nevertheless, serious adjustments were necessary in all school districts so that by September 1985 average class sizes were larger than in 1982 and the pupil-teacher ratio had increased from 17.11 to 18.05.

The fact that the provincial government continued to increase its own spending during the restraint period (even adjusting for recession induced spending on welfare and public debt) accentuated the criticism that education was being singled out for more severe treatment than other areas of public spending. To many people it seemed that education had become a low priority.

Table 3.4 Economic performance and education spending during the recession

Indicator	1982	Annual Percent Increases		
		1983	1984	1985
Gross Domestic Product	3	4	6	6
Personal income	9	4	5	7
Provincial government spending*	6	11	5	4
Consumer Price Index	10	6	4	3
Education spending/pupil	18	2	2	-2 **
Education spending	17	2	0	-3

* Refers to the fiscal years 1982/83, 1983/84, 1984/85 and 1985/86 respectively.

** 1985-86 school year. Until 1985, school districts operated on a fiscal year that coincided with the calendar year. In 1985, the school year was adopted as the fiscal year.

3.D Recovery

In 1984 the provincial economy began a gradual climb out of recession and by 1986 the economy had recovered most of the ground lost since 1981. The provincial government's financial position remained weak compared to the pre-recession period but the traditionally cyclical revenue sources were recovering.

In 1986/87 the education restraint program was ended. Local spending and taxing authority was returned to school boards. School boards took advantage of this discretion to restore some of the programs and services lost during the restraint period. Although provincial funding continued to increase at a modest pace, total school board operating expenditure increased by over 5% in 1986/87 and by 7% in 1987/88. Table 3.5 illustrates the performance of the economy and education spending since 1986.

In February 1988 the provincial government announced the first major enhancement to educational funding since the start of the restraint program. For the 1988/89 school year the fiscal framework is to be increased by 8%. This increase, together, with local taxing decisions will lead to an increase in school district operating budgets of approximately 9%. The impact of this new funding on staffing levels and class sizes will depend on the outcome of collective bargaining. However, if teacher salary awards are in line with average settlements in the province the pupil/teacher ratio could return close to the level achieved prior to 1982.

Table 3.5 Education spending and economic performance in the recovery period

Indicator	1986	Annual Percent Increases	
		1987	1988 (est.)
Gross Domestic Product	4	8	7
Personal income	4	6	n/a
Provincial government spending	6	6	5
Consumer Price Index	3	3	4
Education spending/pupil	6	6	9
Education spending	5	7	9

4. Raising Revenue for Public Schools

Property tax remains the major source of locally raised revenue for the financing of elementary and secondary education in B.C. As described in Chapter 2, the provincial government establishes the tax rate and collects the revenue from each school district's non-residential tax base, while the individual districts continue to use the revenue from residential property tax to finance their shareable obligations and to satisfy their own fiscal requirements in excess of this amount. Once the district has determined its share of both the operating and the debt services budgets, and has added any supplementary operating and non-shareable capital amounts, the residential tax rate can be determined. The first step in the process of calculating the local residential tax rate is to determine the amount of money that must be raised by the school district. This residential taxation requirement is computed by adding together: the net adjusted shareable operating amount, the net supplementary operating amount, the shareable debt service amount, and the non-shareable capital amount. Secondly, the total of the assessed market value of each residential property in the district (i.e., the tax base) is ascertained. The tax rate, formerly known as the mill rate, will be equal to \$1 of tax revenue for each \$1000 of taxable property value, so if the tax base is \$1,000,000,000, a tax rate of 1 will yield \$1,000,000. If a school district requires \$5,000,000, then dividing the amount to be raised by the value of a tax rate levy of 1, will yield the tax rate to be levied on residential property.

4.A Property Taxation versus Other Sources

4.A.1 The Issue

Because the property tax base is used for both municipal services and school purposes, it has been suggested that this tax base sharing creates unnecessary problems in terms of both revenue collection capacity and accountability. The suggested reform involves the separation of local services into those that are property related and those that are people related. Property related services such as water supply, sewage, roads, fire and police protection should be financed from the value of local property because the vast majority of the benefits received accrue directly to property. People related services such as education, health and welfare bestow benefits on the individual personally and society in general. Thus, they should be financed through taxes on income which are indexed to the individual's ability-to-pay. Since local school boards do not have access to personal income taxation, the logical extension of this argument is that people related services ought to be funded by a tax base available to a higher level of government.

4.A.2 Background

As shown in Chapter 3, the two main sources of revenue used to finance the public school system in B.C. are the residential property tax, levied by the individual school boards, and provincial grants. These grants from the province to each of the school boards are supported by two revenue sources—taxation of non-residential property and provincial general revenue which is raised from the other tax bases available to the province.

Property tax is generally considered to be a specific tax on the holding of real wealth, although in the case of residential property, the tax may be considered to be a consumption tax on the "consuming" of shelter. Real property taxes are imposed on both land and improvements on the land, items that are considered to be immovable. All real properties are placed in categories for tax purposes. In B.C., there are nine classes of property: residential; utilities; forestry; machinery and equipment; industrial; business and other; tree farm; seasonal resort; recreational; and farm land.

As a tax instrument, residential and non-residential property tax has both some distinct advantages over other sources of tax revenue, as well as some rather compelling disadvantages. Consider the residential tax first. This form of direct taxation of wealth, considered to be a highly visible tax, provides a stable, relatively predictable and inelastic source of income for school boards and municipalities. Residential property represents a major form of wealth in our economy, and land and buildings are normally immovable, so discovery is easy and evasion is difficult. As a tax base, residential property is objectively measurable and relatively inflexible to changes in economic conditions. Localized in impact, property tax is suitable for the relatively stable and recurrent expenditure pattern of school boards and local government, thus presenting little conflict with the fiscal and monetary policies of higher levels of government. It is also democratically pleasing, in that local decision makers answer to local residents, thus providing for local accountability. In terms of the school tax, this feature of locally determined rates encourages local interest in, and responsibility for, the shaping of education of the elementary and secondary school level.

On the negative side, the major criticisms of the residential property tax have to do primarily with the principle of equity. Determination of the tax base is relatively expensive to administer due to the need to maintain a regular re-assessment process, although in B.C., school districts obtain the required data as a by-product of the assessment done for the municipalities. Also, it is often found that there are wide variations in residential property values both within and between school districts, thus leaving the jurisdictions with uneven tax bases. A frequent and fundamental criticism of the property tax is that mere ownership of property does not necessarily measure an individual's ability to pay taxes, as measured by current income. Moreover, one form of consumer spending (housing) is taxed, but other forms of consumption are left untouched. Also, the tax must be paid in after-tax income, i.e., money earned from other sources and not subject to withholding. The tax fails to conform to the "benefits received" criterion of fairness in that the benefits of education do not correlate well with ownership of residential property. The tax does not automatically increase with the growth in national income, resulting in a lag in tax growth. This is less of a problem in B.C., however, where the assessment and regular re-assessment process helps to keep property tax revenues in line with the growth in provincial income. There is also some worry that the tax is not neutral in its impact in that it may encourage inefficient patterns of investment in urban areas, and possibly discourage property improvements. Finally, the most controversial criticism of residential property tax has to do with its alleged regressivity. It has been assumed, traditionally, that the tax absorbs a greater percentage of income from those with low incomes than from those with higher incomes. The Homeowner Grant is specifically targeted to alleviate this presumed regressivity. However, the results of studies into this question of regressivity are ambiguous if not conflicting, and the question remains in an "embryonic state", according to Kitchen (1984, p. 206). The issue of the Homeowner Grant will be further discussed in Section 4.B.

4.A.3 Findings

In order to briefly investigate the possibility that the costs of the public education system should be borne entirely by sources other than property tax, Table 4.1 has been constructed. The tax increases shown for the social services tax (sales tax), corporate income tax and personal income tax should be regarded as rough estimates only because they are based on the assumption that the tax yield of each base remains constant at its average value. In a more sophisticated analysis, it would be necessary to capture the complex changes in taxpaying behavior which accompany any large tax change.

Based on data for 1986/87, if property taxation for public school purposes were abolished, an additional \$693 million would have to be obtained from other tax bases. If only residential property tax for school purposes were abolished, an additional \$226 million would have to be found. In both cases, it is assumed that the proceeds from the Homeowner Grant continue to be used for school funding purposes even though no property tax for schools is being paid.

In order to determine the tax yield for the personal income tax, the corporate income tax and the social service tax, it is a simple matter to divide the tax revenue from each by the tax rate to obtain the average revenue per tax "point". Thus, for the personal income tax, British Columbia in 1987/88 had a tax rate of 51.5% of the federal income tax and this raised \$2562 million in revenue. Dividing the tax revenue by the tax rate produces the conclusion that each percentage point on British Columbia's personal income tax raises \$49.75 million. For the corporate income tax, the rate in British Columbia was 15%, reduced to 14% on January 1, 1988. Thus, dividing corporate income tax revenue of \$387 million by 14.75% (the weighted average of the two rates) produces the conclusion that each percentage point

on the corporate income tax scale generates \$26.24 million on average. The social services tax during 1986/87 was 6%, and the tax generated \$1343 million in revenue. This produces the conclusion that each percentage point on the social services tax generates \$232.17 million on average.

Based on these average tax yields, generated from property tax information for 1986/87 and tax rates for 1987/88, Table 4.1 shows that property tax for school purposes could be abolished if the social services tax were increased by nearly 3%. Alternatively, if only residential property were exempted from taxation for school purposes and non-residential property continued to be taxed, the required percentage increase in the social services tax to offset the revenue shortfall is estimated to be nearly 1%. The numbers for the personal and corporate income tax increases are interpreted in a similar way. Thus, if all property taxes for school purposes are abolished, the revenue shortfall of \$693 million can be re-captured by increasing British Columbia's personal income tax by nearly 14% points, i.e., from 51.5% to 65.5% of the federal rate.

Obviously, the required revenue for school purposes can also be obtained by spreading the tax increases over the three bases. If the required increase is allocated in proportion to the revenue raised by each of the three sources—59% for personal income tax; 8.9 % for corporate income tax; and 32.1% for the social service tax—the required increases when no property tax is levied is 8.22% points on the personal income tax, 2.36% points on the corporate income tax and 0.96% points on the social services tax. If only residential property tax for school purposes is abolished, the shortfall of \$226 million could be raised by increasing the personal income tax by 2.67% points, the corporate income tax by 0.76% points and the sales tax by 0.31% points. Other weighting schemes to distribute the burden across the three tax bases can be imagined, and will result in different increases.

Table 4.1 Estimated Increases in Tax Rates Required if Property Tax for School Purposes is Abolished

Required Percentage Increase if Revenue Entirely From:	No Property Tax for School Purposes	No Residential Tax for School Purposes
Personal Income Tax	13.93% points	4.54% points
Corporate Income Tax	26.41% points	8.61% points
Social Services Tax	2.98% points	0.97% points

Source: Ministry of Education Annual Report, 1986/87; Provincial Budget, 1987; and author's calculations.

4.A.4 Conclusions

The elimination of property taxation in support of public education, and associated increases in personal, corporate, or social service taxes to generate the required amount of forgone revenue, generates both positive and negative theoretical observations. On the positive side, it is argued that people related services such as education are best funded by taxing income bases where the tax paid can be indexed to ability-to-pay. Because property tax is a tax on wealth as measured by the current market value of land and improvements on the land, the connection between taxes paid and ability-to-pay property taxes is often very weak. The most powerful theoretical argument in favour of retaining property tax for school purposes is that it is the only tax base which is clearly local in nature. But giving up this tax base, and having public education totally funded by the provincial tax sources which generate the consolidated revenue fund, the weight given to local educational preferences will have been considerably reduced.

In terms of empirical significance, the elimination of all property tax in support of public education would place such an immense burden on any one of the other tax bases so as to make the suggestion not practical. Allocating the required tax increases to the three tax bases of personal income, corporate income, and sales would mitigate the pressure on any one considerably, but the required changes are still too large to be considered practical. If only residential property is exempted from taxation for school purposes, the required increases in the other taxes either individually or

in some shared fashion, is more realistic. However, the offsetting loss of local input and accountability for educational decisions, combined with the required tax increases from other income sources, produces the conclusion that the potential gains are not worth the potential cost.

4.A.5 Suggestions

It is suggested that the use of property taxation for school purposes be continued in order to ensure the maintenance of a credible tie between local educational preferences and the political/economical decision making process which determines taxing and spending levels for education.

4.B Non-residential Property Tax Base

4.B.1 The Issue

Chapter 2 made clear that in addition to temporarily centralizing school board budget setting control in Victoria in 1982, the province redefined the tax base for each school district to exclude non-residential property. By suspending the school board's ability to set their own budgets, or to raise revenue above the level determined by the province during the period of restraint 1982 to 1986, the province effectively determined the residential tax rate in each school district through the administration of the disbursement formula. In 1986, the Education (Interim) Finance Act was amended, returning to school boards the power to set final budgets, and to raise revenue for supplementary portions of operating budgets, but only by taxing the residential tax base. Thus, non-residential property has been removed as a tax source for local school boards. The province continues to control all non-residential taxation for school purposes, to be responsible for the tax rates on these properties, to take any tax levied into general revenue, and to redistribute the proceeds from such tax.

The question of whether or not centralized provincial control over the collection and expenditure of non-residential property taxes should continue naturally arises as an important topic for educational funding. The Commission has received a number of submissions on the topic.

The Association of British Columbia School Superintendents point out in their brief that the issue is structurally related to the question of adequacy of funding. They state:

"Seventy-three of seventy-five B.C. school districts are currently spending \$129 million, raised from the local homeowner, to provide what the districts believe to be essential education, but which the provincial government does not include in its regular sharing formula. Some districts are spending as much as 17% above their provincially approved budgets. Contrastingly, and in spite of these additional efforts, some of these district's per-pupil costs are as much as \$1,000 per pupil less than comparable districts in other provinces. In addition to the regular taxes for education, the average homeowner in British Columbia is now paying \$80 (or \$348 per pupil) to provide education above the approved spending limits. Over the last three years, the tax burden on residential properties for provincial education cost has risen from 8.9% to 15% while commercial and industrial taxes decreased from 30.1% to 21.4%. This significant increase in residential taxes has caused resentment among many homeowners towards public school education. This resentment is exacerbated when it is considered that approximately 70% of B.C.'s adults no longer have children in our schools."

Based on this discussion, the Association goes on to recommend that, "the government increase the funding from general revenues for public school education, in order to reduce the excessive costs presently assumed by the local homeowner."

The brief submitted by the British Columbia School District Secretary-Treasurers' Association makes the same point that the question of local access to the non-residential tax base is interwoven with the question of funding adequacy. On this issue they state:

"...the Ministry statistics release...shows a minimal increase in fiscal framework funding in the 3 1/2 years between 1984 (calendar year) and 1987/88 (school year). This increase is 4.6%, or 1.3% per annum, much less than inflation (CPI). This demonstrates clearly the inadequacy of provincial funding to the public education system. The resultant shift of cost to local residential taxpayers must not and cannot be construed as inordinate cost increases in the system."

The British Columbia School Trustee Association move their analysis of the issue more directly to policy recommendations. They bluntly state in one of their reform of school finance recommendations that the provincial government should, "restore the ability of boards to tax non-residential property." This same suggestion is repeated by the British Columbia Teachers Federation, and the Teachers' Association briefs received from Coquitlam, Kamloops, Nanaimo, Campbell River, Central Okanagan, Surrey, Delta and North Vancouver, as well as the Retired Teachers Association of Vancouver. Obviously, the issue has generated a good deal of controversy, and is central to many of the closely interrelated issues involved with school finance.

4.B.2 Background

Many of the strengths and weaknesses associated with residential property tax and discussed in Section 4.A.2 are also associated with non-residential property tax, and particularly to the school tax portion which is levied and collected by the provincial government in British Columbia. A major concern is the effect the tax has on economic activity, specifically, on the decisions made by businesses to undertake new investment or to change production levels. When levied by school boards, the school tax on non-residential property may not be neutral in its effect, i.e., differences in tax rates between adjacent jurisdictions may affect the location of businesses and distort efficient location patterns. A second concern is the proportion of the required school tax revenue raised by taxing non-residential in comparison to residential properties. Industries with large sunk investments and highly durable assets in a specific location represent a "captive" tax resource for the local municipality and school district. The worry is that a disproportionate share of the required tax revenue will be borne by the non-residential tax base in order to lower the rates for residential property owners in comparison to similar districts who do not have the same non-residential tax base. This criticism is especially important when it is realized that the industrial and commercial sector benefits from the public provision of education, but probably no more than residents considered as individual citizens.

4.B.3 Findings

The Education (Interim) Finance Act of 1982 resulted in the removal of non-residential property as a tax source for local boards, and permitted the province to control all non-residential taxation for school purposes, to be responsible for the tax rates on these properties, to take any tax levied into general revenue, and to redistribute the proceeds from such tax "equitably" (Flemming and Anderson, 1984, p. 27). In addition to achieving this objective of redistribution, the government also intended to, "indicate that the province and local school boards were co-managers in the (education) system and shared equitably the problem of developing the financial resources to pay for education expenditures" (Flemming and Anderson, 1984, p. 26).

The government apparently took seriously the twin concerns of inappropriate business location decisions, and inequitable tax treatment due to disproportionate tax burdens on non-residential properties which are captive to the region. By taking control of non-residential tax revenue, the government could eliminate this factor in the process of deciding where to locate and impose a greater degree of equity in the distribution of the tax proceeds from this source. As well as reducing the variations in the ratio of non-residential to residential tax paid between districts, the provincial government addressed the issue of tax levels by making a commitment to reduce overall the tax burden on non-residential property. In the 1985 Budget, the government announced changes in the non-residential tax system to implement a three-year series of reductions in school tax rates on industrial property by 41% and on business property by 18%. The

tax rate reductions were estimated to lower annual property tax by \$250 million when fully implemented by 1987. One of the stated rationales for this change was the desire on the part of government to, "correct the disparity between relative tax rates on residential and non-residential property which arose during fluctuating real estate markets of the early 1980's". (Budget, 1985, p. 72.) A second motivation was to increase the competitiveness of business and industry already in existence and to encourage investment in new business and industry. To this end, the government also announced in 1985 a phased elimination of all property tax on machinery and equipment over three years. Since B.C. was one of the last jurisdictions in Canada to include machinery and equipment in the property tax base, the removal of this tax, coupled with incentives to promote new investment in the province, was designed to eliminate a cost disadvantage to B.C. industries, to enhance the climate for investment, and to simplify the tax system. (Budget, 1985, p.71.) However, the province made it clear that this reduction in tax revenue would have "no effect on the funding provided for the operation of public schools nor on the school tax rates on residential property". (Budget, 1985, p. 72.) The decrease in revenue from non-residential school taxation was to be "fully compensated for by an increase in contributions to school districts from provincial revenue". (p.72)

Tables 4.2 and 4.3 show the effects of these changes from the calendar year 1982 to the school year 1988/89. Both tables show the distribution of revenue sources between general provincial revenue, non-residential property tax, and residential property tax, including the proceeds from the Homeowner Grant. Table 4.2 displays these shares in terms of absolute dollar amounts, measured in millions of current dollars, and Table 4.3 shows percentage shares. For example, Table 4.2 shows that for the school year 1987/88, revenue from these three sources was \$1880.7 million, consisting of \$842.3 million from general provincial revenue, \$446.9 million raised through non-residential property taxes, and \$591.5 raised by residential property taxes including the proceeds of the Homeowner Grant. The results of government's desire to both standardize the non-residential tax rates across the province, and lower the tax revenue for school purposes from this source, are clearly shown in Table 4.2. Non-residential tax revenue was constant in nominal terms between 1982 and 1984, then fell dramatically to the 1987/88 level of \$446.9 million, and is estimated to rise to \$500 million in 1988/89. In comparison, the contributions from the general provincial revenue rose continuously over the period. Revenue from residential taxation was essentially constant in nominal terms until the school year 1985/86, then rose dramatically in the years 1986/87, 1987/88 and 1988/89.

Table 4.3 displays these same data in terms of percentage shares. The non-residential property tax accounted for 39% of the total public school budget in the years 1982 to 1984, then fell year by year to the 1987/88 level of 23%. Revenue from general provincial sources, in proportional terms, fluctuated in the range of 34% to 36% between 1981 and 1984 and rose to 44% in the years 1986/87 and 1987/88. Revenue from the residential property tax system accounted for 25% to 26% of the total public school budget up until 1985/86 then rose up to the figure of 31.4% for the school year 1987/88, and is estimated to fall to 30.5% in 1988/89.

In summary, the data in these tables supports the following explanation of events between 1982 when the Education (Interim) Finance Act was passed and the most recent school year 1988/89 for which data estimates are available.

The government succeeded in its desire to lighten the school tax burden on non-residential property by proceeding in stages from 1982 onwards. Between 1982 and 1984, the revenue from non-residential property tax was constant in nominal terms. Since the slight decrease in residential property tax income was offset by increases in contributions from general provincial revenue, the relative importance of non-residential property tax remained constant over this period. Beginning with the school year 1985/86, the contribution of non-residential taxation dropped dramatically in both absolute and percentage terms until 1987/88 but is expected to rise slightly in the school year 1988/89.

The resultant shortfall in funds was initially made up by significant increases in revenue from general provincial sources, and to a lesser degree by increases in receipts from residential property taxation. From 1984 to the school year 1985/86 contributions from general revenue increased by 9.7% while residential property tax generated 4.6% more revenue.

Between 1985/86 and 1986/87, contributions from general revenues increased by 15.3% and revenue from residential taxation expanded by 15.7%. Thus, during this transition period, both revenue sources were relied on equally to pick up the slack created by the province's desire to lighten the school tax load on non-residential property.

However, between the school years 1986/87 and 1987/88, increases in revenue from residential property tax picked up a disproportionate share of the shortfall in funds caused by the reduced reliance on non-residential property taxation. During this period, revenue from general provincial sources increased by 7.7%, but revenue from residential taxation increased by 16.7%.

Between the school years 1987/88 and 1988/89, it seems that the shift from non-residential to residential revenue appears to have ended. For the first time since 1982, revenue from non-residential properties rose from \$446.9 to an estimated \$500.0 million. During these years, revenue from residential taxation rose by 6%, and revenue from general sources rose by 10%.

Thus, the revenue "re-balancing" was initially accomplished with offsetting increases in general provincial revenue as per the 1985 Budget Speech, but more recently, by significant increases in the revenue obtained by residential property taxation. The shift towards increased reliance on residential taxation appears to have ended for the most recent school year.

In the 1985 Provincial Budget, the government provided evidence to support the notion that non-residential taxpayers were paying an inappropriate share of the revenue required for local services such as fire protection, police protection, recreational programs, roads, etc. and public schools. Table 4.4, reproduced from the 1985 Provincial Budget, shows 1984 property taxes for a house, store and industry in a typical British Columbia municipality. Unfortunately, there is no breakdown of the information according to whether the funds support local services or public schools.

This table shows that for an equal \$100,000 of market value, the net tax paid by owners of a house is \$721, but it is \$2,472 for a store and \$3,362 for an industrial property. The Budget (1985, p. 70) goes on to state that, "this tax rate structure meant that, in 1984, non-residential property taxpayers were estimated to pay 63% of total property taxes even though this type of property represented only 37% of the total assessed value of property in the province". It is argued that this is a disproportionate share of property taxes collected from the non-residential tax base, so non-residential tax cuts and revenue re-balancing are deemed to be an entirely appropriate policy response.

Finally, it may be argued that provincial control of non-resident taxation and the subsequent shifting of the burden of local school taxation onto the residential tax base is an explicit recognition of the benefit principle of taxation. Certainly non-residential taxpayers are the beneficiaries of an educational system which provides them with trained manpower and, therefore, it is reasonable to expect the business and commercial enterprises to pay a fair share of the costs of providing elementary and secondary education in British Columbia (Fleming, 1981, p. 110). However, there has been considerable criticism of the practice of using the proceeds of non-residential property tax for the financing of people-related public services such as education because business and commercial enterprises do not receive disproportionate benefits to justify the disproportionate share of taxes collected from this source. Flemming and Anderson (1984, p. 26) argue that since the educated labour force required by business is drawn from all areas of the province, the "generally accidental distribution" of business and commercial enterprises should not remain the "private domain" of local school boards. Also, it may be argued that the post 1985 shift towards more reliance on residential taxation for school finance has not resulted in undue hardship to residential taxpayers when the offsetting effects of the Homeowner Grant are taken into account. Table 4.5 shows the number of school districts which had negative net school taxes on residential property for the average valued home in the district in the years 1985 to 1987. In 1987, the number of districts not paying any school taxes on the average valued home in the district dropped to 38 from the previous level of 52 and 51. This, of course, is a reflection of the shift onto greater reliance on the residential property tax discussed above. However, Table 4.5 also shows that the provincial average net school tax paid while rising from \$56 to \$91 remains relatively small. Thus, the degree of hardship caused by this policy-induced shift towards more reliance on the residential property tax base has been rather small, on average, and certainly within the bounds of historical experience.

The case for returning the non-residential tax base to local school boards rests on the desire to introduce a greater equalization of revenue raising capacity between the districts. Mr. John Malcolmson, a BCTF Research Analyst, puts the case as follows:

... the impact of the continuation of centralized provincial control over the collection and expenditure of non-residential property taxes helped exacerbate cross-district inequities in the ability to generate supplemental school district funds. (1988 Budget Recovery Kit, p. 26)

With wide variations in the level of revenue raising capacity (as measured by the residential property assessments per pupil), levels of tax-effort (as measured by the local school tax rate) will have to vary dramatically in order to raise the required funds. It is, of course, quite inequitable that some school districts are able to provide a high level of educational service with a relatively low tax effort while others are able to only supply low service levels even with high tax effort. One extreme notion of revenue raising equity is the "equal yield" or "district power equalization" concept under which each district would be guaranteed the same amount of revenue per pupil for each mill levied. School District 57 (Prince George) in its brief to the Commission, recommends a variation on this concept for the funding of net supplementary operating budgets and non-shareable capital budgets. The argument is that by removing the non-residential tax base from the local school boards, a greater degree of tax inequity has been imposed on the system.

In order to investigate the claim, Table 4.6 shows the mean, standard deviation and coefficient of variation for the 1986 levels of per pupil residential, non-residential, and total property assessment levels. The average residential assessment per pupil across all 75 school districts averaged \$137,181 in 1986, with a 62.9% variation around this mean. The non-residential series has a lower average assessment per pupil (\$105,577), but a very similar degree of cross district variation (65.9%) when compared to the residential data. However, when the residential and non-residential data are combined to produce the series on total property assessment per pupil, the mean and standard deviation naturally rise, but because the mean rises more than the standard deviation, the coefficient of variation falls to 42.4%. This implies that there is 10.5% less cross district variation in total assessment per pupil than there is in residential assessment per pupil considered by itself. In other words, combining the residential with the non-residential tax bases has produced greater equalization of revenue raising capacity between the districts. The question is whether the tax equity benefits of this step towards greater equalization in revenue raising capacity outweigh the costs discussed earlier.

Table 4.7 shows the results of this dispersion in revenue raising capacity in terms of the resulting tax rates necessary to raise the required revenue for supplemental school budgets. For ease of explanation, only the five school districts with the highest and lowest tax rates are displayed, along with the the average gross and net taxes paid in each of the districts. From this table, it may be seen that local reliance on the residential property tax only does necessitate wide variations in tax rates—the range is from 18.68083 in Stikine to 3.77532 in West Vancouver. However, the result in terms of average gross and average net tax actually paid is very similar between the two groups. The average gross tax paid by the average valued house in the five highest tax rate districts is \$369, and the similar figure for the lowest tax rate districts is \$414. Thus, the issue of increased cross district inequity by forced reliance on the residential property tax base only would appear not too important in practice. The relative unimportance of differences in tax rates between school districts in terms of actual levels of school taxes paid comes from the fact that provincial grants to the various school districts for core program costs have already been equalized to account for differences in local revenue raising capacity. Thus, the consequences of dissimilar tax rates are only relevant for the funding of net supplementary operating budgets. Further equalization of tax rates could be built into the fiscal framework by expanding the definition of school expenditures which are sharable, i.e., increasing the level of the provincial grants to the districts. In fact, full provincial funding may be seen as an extreme version of per pupil expenditure equalization. However, with each step toward increased provincial grants comes the offsetting loss of local control over the characteristics of the educational output produced.

Finally, some additional evidence on this question can be obtained by investigating the funding situation in the other provinces. Each enacts its own legislation pertaining to education, and determines its own method for financing the operating and capital expenditures related to its education system. This information is summarized in Appendix 2. Since New Brunswick, Prince Edward Island and Newfoundland finance elementary and secondary education almost exclusively from provincial grants, the issue of school district control of the non-residential tax base does not arise. For the other provinces, a wide variety of practices are in place with respect to the setting of tax rates and collection of revenue from the non-residential tax base. For example, in Ontario, the local school boards raise their share of revenue by taxing all classes of local property. The Ontario Commission on Declining Enrolments (1978) recommended that all industrial and commercial properties be assessed and taxed for school purposes directly by the province at the same rate. Atherton (1985, p.97) points out that there has been, "no movement towards the provincialization of non-residential property tax," but recently Ontario has proposed to limit the extent to which the commercial and industrial assessment can be taxed for local benefit.

Table 4.2 Major Sources of Funding for Public Education in B.C.—Revenue by Source

Sources of Revenue ¹ (millions)	1982	1983	1984	1985/86	1986/87	1987/88	1988/89
General Provincial Revenue ²	579.9	611.9	617.6	677.3	780.9	842.3	926.5
Non-Residential Property Tax	662.5	662.7	662.7	557.2	466.2	446.9	500.0
Subtotal	1242.4	1274.6	1280.3	1234.5	1247.1	1289.2	1426.5
Residential Property Tax ³	431.0	423.8	419.0	438.2	506.9	591.5	627.0
Total	1673.4	1698.4	1699.3	1672.7	1754.0	1880.7	2053.5

1. Excludes miscellaneous revenues and surpluses.

2. Excludes textbook allocations and teacher pension amounts.

3. Includes Homeowner Grant.

Source: B.C. Ministry of Education: Annual Report 1986-87; Ministry of Education Schools Finance, Ministry of Education estimates (1988/89).

Table 4.3 Major Sources of Funding for Public Education in B.C.—Percentages of Total by Source

Sources of Revenue (percentages)	1982	1983	1984	1985/86	1986/87	1987/88	1988/89
General Provincial Revenue	34.7	36.0	36.3	40.5	44.5	44.8	45.1
Non-Residential Property Tax	39.6	39.0	39.0	33.3	26.6	23.8	24.3
Subtotal	74.3	75.0	75.3	73.8	71.1	68.6	69.4
Residential Property Tax	25.7	25.0	24.7	26.2	28.9	31.4	30.5

NB. Totals may not add exactly to 100 due to rounding.

Table 4.4 1984 Property Taxes in a Typical British Columbia Municipality.

Property	Market Value (\$)	Assessed Value (After Assessment Deduction) (\$)	Total Tax Rate for all Purposes* (\$/1,000 of Assessed Value)	Gross Tax (\$)	Net Tax (After Deduction of \$380 Home Owner Grant**) (\$)
House	100,000	100,000	11.01	1,101	721 **
Store	100,000	90,000	27.47	2,472	2,472
Industry	100,000	90,000	37.36	3,362	3,362

* As discussed in the text, this includes taxes levied for municipal purposes, regional district purposes, regional hospital district purposes and taxes levied for the British Columbia Assessment Authority, the Municipal Finance Authority and public transit.

** Residential taxes for seniors, the handicapped and war veterans would be reduced by a further \$250.

Source: 1985 Provincial Budget.

Table 4.5 Average Net School Taxes on Residential Property.

	Number of School Districts Paying Negative Net School Taxes on Residential Property Year Valued at the District Average	Net School Taxes On Residential Property—Provincial Average
1985	52	\$56
1986	51	\$80
1987	38	\$91

Source: BCTF.

Table 4.6 Measures of Cross District Differences in Tax Capacity, 1986.

	Mean	Standard Deviation	Coefficient of Variation*
<i>Residential Assessment</i>			
Per Pupil	\$137,181	\$86,389	62.9%
Non-Residential Assessment Per Pupil	\$105,577	\$69,571	65.9%
Total Assessment Per Pupil	\$242,758	\$102,807	42.4%

Source: BCTF Data and author's calculations.

* Coefficient of Variation is standard deviation divided by the mean.

Table 4.7 Tax Rates Applied Against Each \$1000 of Net Taxable Residential Property in 1987.

District	Tax Rate	Average Gross Tax (\$)	Average Net Tax (\$)
Stikine (87)	18.68083	251	(129)
North Thompson (26)	12.81624	370	(10)
Burns Lake (55)	11.86806	400	(20)
Arrow Lakes (10)	11.09499	345	(35)
Kitimat (80)	11.06541	478	98
Vancouver (39)	5.80663	621	241
Armstrong (21)	5.65408	257	(123)
Merritt (31)	5.33329	232	(148)
Gulf Islands (64)	5.01722	342	(38)
West Vancouver (45)	3.77532	620	(240)
Provincial Average	6.82008	471	91

Source: BCTF.

4.B.4 Conclusions

We consider it fundamental that some degree of local taxation to support primary and secondary education be maintained in order to ensure a continued tie between local preferences and the political decision making process which determines taxing and spending levels for education. Without a fiscal contribution raised by local taxation, locally elected officials will have no "seat-at-the-table" where education decisions are being made. It has already been concluded that reliance on property tax to fund elementary and secondary education is not without its problems, but no other readily available tax base is clearly superior in terms of guaranteeing some degree of local control, and in terms of efficiency in administration, effectiveness in compliance, and neutrality in taxpayer behaviour.

Whether non-residential and residential properties should both be considered as components of the local tax base remains, however, an important question. The alternative position, adopted by the province in 1982, is that the non-residential tax base is a provincial resource not belonging to any one school district for tax purposes. Provincial control of the revenues raised from this source, when distributed back to all school districts through the fiscal framework, is seen to be more equitable. The arguments for and against the return of the non-residential tax base to local school boards pit the concept of a slightly more equal distribution of district tax capacity for the funding of supplementary budgets against the notions that local control of the non-residential tax base can distort business investment and production decisions, and may be used to give residential property owners unduly favourable property tax treatment. On balance, it is concluded that the non-residential tax base should remain with the province. While it is true that somewhat more cross district variation exists in the residential tax base when compared to the total property base, the importance of this observation in terms of actual tax paid is deemed to be not significant. This follows because the proceeds of the non-residential tax are re-distributed to all school districts through the fiscal framework which contains an equalization mechanism. Finally, with respect to the question of the appropriate proportions of the required revenue which should come from the three sources—general provincial revenue, non-residential and residential tax bases—it is concluded that no definitive "correct" ratio can be found. Local tax sources must generate sufficient revenue to ensure that local preferences for education are given credibility in the political and economic decision making processes, but not so large that wide variation in the levels of local taxation and expenditure per pupil are produced between school districts. The Ontario Commission on Declining Enrolments (1978), in addition to recommending that all industrial and commercial properties be assessed and taxed for school purposes directly by the province at the same rate, also recommended that property taxation in general, i.e., residential, commercial, industrial and farm, be the source of 40% of the total provincial cost of school board operations. In comparison, the preliminary report of the ill-fated Commission of Inquiry on Property Taxation (McMath Commission, 1976) in B.C. suggested that local tax sources, which at the time meant both the residential and non-residential tax bases, contribute 25% towards the cost of board operations. It is concluded that less attention should be paid to mechanical "rules" for allocating expenditure proportions, and more paid to maintaining a balance between the degree of cross district variation in expenditure and net taxes paid per pupil and the legitimate desire of local school boards to determine expenditure levels which reflect the preferences of residents in the community.

4.B.5 Suggestions

1. *The province should continue to set and collect the non-residential tax so long as all tax proceeds raised from this tax base are re-distributed back to the school districts through the fiscal framework.*
2. *There is no correct level of locally raised revenue for school purposes. The amount must be high enough to produce credible and representative local input, but not so high that widely unequal amounts of per pupil cross district expenditure and net tax levels result. The process by which the right balance can be found should remain flexible subject to the suggestions in Chapter 5, and less attention should be paid to debating the "correct" level of local versus provincial funding.*

4.C The Homeowner Grant

4.C.1 The Issue

The Homeowner Grant, provided to British Columbia residents since 1957, provides lump-sum grants to reduce the property tax liability for owner-occupied residences by up to \$380 for homeowners under age 65 and up to \$630 for those 65 and over. The grant is applied first to current school taxes, and then any remaining balance can be used to reduce general municipal taxes. The Commission received several suggestions regarding the Homeowner Grant.

The brief presented by the British Columbia School District Secretary-Treasurers' Association was typical of many. It states:

"The Homeowner Grant is a problem. It has not been increased in many years, and this causes gross distortions in percentage measurements of residential tax increases as they occur. Secondly, a large portion of the grant goes to municipal, non-school purposes. These two problems require urgent redress."

In terms of recommendations, the Secretary-Treasurers' suggest that, "Homeowner Grants be fully directed to education and be adjusted annually by CPI."

The brief from the British Columbia School Trustees Association points out that the debate about funding adequacy has been confused, "because some groups have treated this grant as a contribution to education and others have treated it as a tax relief expenditure not related to education." They suggest that the Homeowner Grant is an instrument of property tax relief and hence, it would make sense to, "remove the Homeowner Grant from the education budget and show it as a tax relief cost to the Ministry of Finance." (Recommendation C10). Curiously, in a previous recommendation on the proportion of public school expenditure raised through local property taxation, (Recommendation C1), the School Trustees Brief appears to count the Homeowner Grant as provincial money for education.

From these submissions, and from the briefs received from individual teachers' associations, school districts and boards of trade, two policy issues surrounding the Homeowner Grant stand out. The first concerns the estimated \$30 million in Homeowner Grants which are not used for educational purposes, but instead "spill over" in general municipal revenue. While this seems on the surface to be a rather straightforward issue with a straightforward solution, it really masks a more fundamental conceptual problem. The Homeowner Grant is available to all residential property owners as a lump sum grant regardless of wealth as measured by property value, or "need-to-receive" as indicated by income level. The only factor used to segment recipients is age, in that those 65 years and older receive \$630 while all others receive \$380. Thus, a high valued and low valued home receive the same grant so long as the registered owners are in the same age grouping. The question naturally arises regarding whether the size of the grant should be made dependent on property value, or recipient income level. In this way, the grant could be more targeted, and set so that there is no spillover of grant funds into non-educational uses. The second issue concerns the size of the grant, and the process by which it increases over time.

4.C.2 Background

The philosophy of taxing property is based on three, often competing, concepts—equal treatment of equals, benefits received and ability-to-pay. The first is a fundamental principle of equity which suggests that taxpayers who are equal in all relevant economic dimensions before taxation should remain equal after taxation. With respect to property taxation for school and municipal purposes, the most common source of inequity involves under or over assessment of different classes of property in different taxing jurisdictions. In British Columbia, problems arising from this source have been effectively dealt with by creation of the British Columbia Assessment Authority. This agency ensures province wide, current market value assessment of the various property types.

The second principle of property taxation suggests that the tax paid should in some way be proportional to the benefits provided by the public service made possible by taxation. More sophisticated versions of this principle point out that the property tax burden should be allocated among taxpayers on the basis of marginal benefits received, or in proportion to the costs that individuals and their property impose on the government or the whole community. The generic point which emerges is that the level of tax paid should be related to the benefits received.

The final principal of taxation relevant to property tax is ability-to-pay, a self explanatory concept which is the basis of the personal income tax system. Section 4.A.2 made clear that the most controversial criticism of the use of property taxation for school and municipal purposes is related to the ability-to-pay concept, specifically the alleged regressivity of this form of taxation. It has been traditionally assumed that property taxes absorb a greater percentage of income from those with low incomes than from those with higher incomes. The specific objective of the Homeowner Grant is to remove at least part of the presumed regressivity.

The issue of property tax regressivity is an old chestnut among academic economists and municipal administrators. "Old views" clash with "new views" to produce a type of policy paralysis on the question. Professor Kitchen (1984, p.200—206) concludes Canadian and U.S. theoretical and empirical evidence on the issue with the conclusion that,

"perhaps the safest and best observation that can be made as a result of these studies is that the new view indicates that the property tax is not as regressive as the traditional view claims nor is it likely to be as progressive as some of the advocates of the new view have suggested."

Clearly, we are in uncharted waters with respect to the regressivity question, and hence, with respect to the desirability and form of property tax relief.

4.C.3 Findings

Beginning in 1957, owner-occupiers of residential properties in British Columbia received property tax relief in the form of the Homeowner Grant. The amount paid has changed over the years, but the basic form has remained constant in two important respects. First, the grant has always been distributed as a lump-sum payment with qualified owners over the age of 65 receiving a larger grant. Second, the grant is first applied to school taxes, with any remaining credit going to general municipal taxes. The only slight deviation from these two characteristics occurred in 1974 and 1975. During these years, provincial legislation provided for a complex grant known as the School Tax Removal and Resources Grant. During 1974, this grant provided 20% of the difference between the school tax and the Homeowner Grant with a maximum contribution of \$40 and a minimum one of \$30. This level of support was increased to 40% of the difference in 1975 with a \$30 minimum and a \$80 maximum. In 1976, the grant was discontinued, and the basic Homeowner Grant increased from \$200 to \$280.

Other provinces have also apparently concluded that property tax is regressive or, at least, not progressive enough and hence, have introduced mechanisms to alleviate part of the burden. Historically, property tax relief in Canada has taken four forms—homestead exemptions which exempt part of the assessment base; exemptions based on income; homeowner grants; and property tax credits. The two most popular forms of property tax relief are homeowner grants distributed directly to the property owner, and property tax credits which are administered along with the income tax and is received as a credit against the income tax liability. As such, relief delivered through the income tax system appears to the recipient to be a reduction in income taxes rather than a reduction in property taxes. The various property tax relief schemes currently used in Canada are summarized in Table 4.8 (next page).

Table 4.8 Property Tax Relief

Provinces	Description
British Columbia	A provincial homeowner grant is applied first to school taxes; any balance is deducted from general property taxes. For senior citizens and handicapped homeowners, the grant is \$630, with a minimum property tax payable of \$1. For all other homeowners, the grant is \$380, with a minimum tax payable of \$200. Senior citizens and handicapped homeowners may defer property tax payments until the property is sold or ownership is otherwise transferred.
Alberta	Eligible farm and owner-occupied residential property is exempt from provincial school tax. Municipal taxes less than \$200 are refunded (less than \$1000 for senior citizens).
Saskatchewan	Low-income senior citizens receive a grant to reduce school and property taxes. For those with an income of less than \$25,000, the grant is \$500. (\$700 if married); for those with an income between \$25,000 and \$30,000, the grant is \$250. (\$350).
Manitoba	A property tax credit is administered through the personal income tax system. The minimum tax credit is the lesser of \$325 and the property taxes paid. Above this, the credit is equal to the lesser of \$525 and \$525 reduced by 1% of family income. For senior citizens, it is the lesser of \$700 and \$700 minus 2% of family income over \$15,000. Rebates of school taxes and shelter allowances for renters provide additional property tax relief for senior citizens.
Ontario	A refundable property tax credit is provided for homeowners and renters through the personal income tax system. The property tax credit is the lesser of \$230 and occupancy cost. Senior citizens receive property tax grants equal to the lesser of \$600 and the property school taxes paid (or 20% of rent).
Quebec	A refundable property tax credit system for homeowners and renters is administered through the personal income tax system. The property tax credit is equal to 40% of allowable property taxes, reduced by 2% of household taxable income, with a minimum credit of \$384 in 1988. For renters, the credit is proportional to the area of the dwelling they occupy. An additional \$100 is added to the credit for those on the federal guaranteed income supplement.
New Brunswick	Grants are provided to homeowners with an income below \$8500. The grants, up to a maximum of \$200, are credited against property tax owing.
Nova Scotia	Municipal Councils may exempt from property tax individuals whose income is below a locally specified amount if the taxpayer is over 65, widowed or supporting a dependent.
Prince Edward Island	Senior citizens receiving guaranteed income supplement payments may defer up to 100% of property taxes until the property is sold or otherwise transferred.
Newfoundland	Individuals with incomes below \$6000 are exempted from school taxes. This base amount is raised when the individual has dependents.

Source: Provincial and Municipal Finances 1987, Canadian Tax Foundation.

4.C.4 Conclusions

Based on the current state of conceptual and empirical evidence on the question of property tax relief, it is concluded that no compelling case for drastic reform of British Columbia's Homeowner Grant can be supported. There is no shortage of other models to build on, but the benefits of the change are deemed to be not worth the costs. It is, however, concluded that the estimated \$30 million in Homeowner Grants which spill over into general municipal revenue be re-captured for school purposes by means of a minimum school property tax. This conclusion implies that some of the unused portion of the Homeowner Grant will no longer be available to some property owners to be applied against their municipal tax liability. However, given that most municipal services such as water supply, sewage, roads, fire and police protection are property related, benefit based taxation implies that all homeowners should be asked to contribute something to the provision of the service.

The second policy issue concerns the size of the Homeowner Grant, and the process by which it has been increased over time. Proposals to index the grant to some economic aggregate such as the consumer price index cannot be supported because the conceptual link between the size and timing of grant increases and a suitable economic aggregate cannot be made. It is concluded that the size of the grant and timing of any increases be left as an untied variable in the school funding system, provided that net average residential school taxes do not exceed their historical range.

4.C.5 Suggestions

No drastic changes in the principles and procedures underlying the Homeowner Grant are required at this time. However, it is recommended that a minimum tax for school purposes be implemented in order to help return the portion of individual Homeowner Grants not used for educational purposes back to local school boards.

5. Provincial Operating Support

5.A Adequacy and Stability of Funding

Are schools adequately funded? This question has been at the centre of public debate over school funding in recent years. The debate was at its height from 1982 to 1985 when the government's restraint program was in full force. Since then more resources have been found for schools, from both local taxpayers and the provincial government. As a result, the general issue of funding appears to be less controversial today than it was three years ago when *Let's Talk About Schools* reported the widely held public view that "existing levels of school funding failed to meet community expectations."

The briefs to the Commission reflected this change in emphasis. Many contained requests for additional funding, but for specific programs; there were far fewer references to the overall impact of restraint. The briefs seemed to be more concerned with restoring stability and predictability to funding than securing a substantial injection of additional funds. Nevertheless, the major stakeholders continued to draw attention to the issue of adequate funding.

A number of briefs highlighted the fact that education spending in British Columbia has slipped compared to other provinces. In 1978, British Columbia ranked third out of the ten provinces in spending per pupil but by 1986 B.C. had dropped to sixth place. Over this period spending on education increased by 93% in B.C. but this growth rate was slower than all other provinces except Quebec. According to these figures education spending in B.C. in 1986 was lower than all other provinces except those in Atlantic Canada. See Table 5.1.

Table 5.1 Operating Expenditures per Pupil—Inter-Provincial Comparison

Province	1978 \$	1986 \$	Increase from 1978 to 1986 (%)
British Columbia	1,959	3,779	93
Alberta	1,930	4,355	126
Saskatchewan	1,753	3,805	117
Manitoba	1,841	4,146	125
Ontario	2,082	4,516	117
Quebec	2,660	5,090	91
New Brunswick	1,522	3,273	115
Nova Scotia	1,567	3,517	124
Prince Edward Is.	1,556	3,117	100
Newfoundland	1,450	3,019	108

Source: The Financing of Elementary and Secondary Education in Canada, 1987 (draft). Council of Ministers of Education of Canada.

This slower pace of spending growth is reflected in a comparison of service levels. In 1978, B.C. had the fourth lowest pupil/teacher ratio in Canada. By 1986, the pupil/teacher ratio in B.C. was the third highest in the country. See Table 5.2 (next page).

Table 5.2 Pupil/Teacher Ratio—Inter-Provincial Comparison

	1978	1986	% Change
British Columbia	17.81	17.71	(0.53)
Alberta	18.76	16.82	(10.34)
Saskatchewan	18.54	16.82	(9.28)
Manitoba	17.34	15.48	(10.71)
Ontario	18.68	17.08	(8.57)
Quebec	14.94	15.10	1.06
New Brunswick	20.40	18.29	(10.34)
Nova Scotia	17.57	16.39	(6.68)
Prince Edward Island	18.58	17.80	(4.22)
Newfoundland	18.70	16.22	(13.27)

Source: The Financing of Elementary and Secondary Education in Canada, 1987 (draft). Council of Ministers of Education of Canada.

These inter-provincial comparisons must be interpreted with some care for a number of reasons. First, the most recent data available does not reflect the injection of funds that has taken place over the last couple of years. Second, spending trends tend to be dominated by salary trends and salaries in B.C. generally have increased more slowly than elsewhere in Canada in recent years. Third, these comparisons do not consider the ability of each provincial economy to support additional public spending.

The work of the Commission does point to selected areas where enrichment is justified or where additional funding would be necessary if the school system is to take on new responsibilities. These should be dealt with on a case by case basis. However, too much of the discussions surrounding the adequacy of spending has concentrated on what is an adequate level of spending today. Of equal importance is to establish a system of financing that will ensure reasonable stability and predictability in funding over time.

Since the beginning of the 1980s funding for schools has been through a cycle of rapid expansion followed by rapid contraction followed by another period of expansion. The education system cannot absorb these ups and downs in the same way as other segments of our economy because the public expects the standard of service to be maintained at a reasonable level. Education is a long term investment that should not be subject to violent fluctuations in funding. This is not to say that the education sector should be fully insulated from economic cycles; but changes in funding should be gradual, and the basis for funding understood and accepted by the parties involved. The education system has had to struggle to adjust to changing resources over the past few years but, equally as important, the system has had to cope with a situation where the "rules of the game" were constantly changing. For this reason, we have considered alternative funding systems that could lend more stability and predictability to the system.

We recognize, however, the difficulty in finding a financing system acceptable to all parties involved in education. The level of spending on a public program will always be a compromise between conflicting forces: the desire to improve service levels, the willingness of taxpayers to provide additional funding, the capacity of the program to improve its efficiency and the competing demands of other public programs. There is no unambiguously correct spending level.

The difficulty of establishing an acceptable spending levels becomes more pronounced when two levels of government are involved—one responsible for delivering the program and the other for providing part of the funding. In such a situation there will always be some conflict between the funding "needs" as defined by the party receiving support and the "willingness to pay" of the granting agency.

The problems of inter-governmental funding are pronounced in the public school system for two reasons. First, the provincial government plays a major role in establishing the program to be delivered and the level of funding. Second, school boards have limited flexibility in responding to perceived inadequacies in funding. They cannot turn away students and have limited flexibility in the style of service delivery. It is therefore especially difficult therefore to create a funding system for education that is acceptable to all the parties involved.

Three approaches to designing a more stable funding system are possible:

1. Shared-cost funding

Under this approach the provincial government would cover a fixed proportion of school district spending. All costs incurred by school boards would be recognized as necessary costs. This approach ensures a predictable consistent pattern of financing from the provincial government but has a number of obvious weaknesses: it implies an open-ended commitment on behalf of the provincial government; it requires the government to carefully audit actual costs; and, it generates weak incentives for cost control by school boards.

The financing system in place prior to 1982 was similar in some respects to this approach. The Basic Education Program was based on actual school board spending but the government did not commit itself to paying a fixed proportion of the cost of the program. As school board spending rose faster than the government's willingness to pay, the government's share of Basic Program funding went down.

2. Standard Costing

An alternative approach is for the government to replace actual costs with its own calculation of acceptable or recognized costs. This can be done by setting standard service levels for each component of schooling which, together with appropriate cost factors, are used to build up the recognized cost of delivering a common education program throughout the province.

This is the approach adopted by the provincial government since 1982. It allows the government much more control over the recognized level of spending and thereby allows it to commit to maintain funding at 75% of the recognized spending level. However, by deviating from actual costs it generates considerable debate over the appropriateness of the formula used for setting service levels and costs.

3. Block Funding

The third approach would divorce funding from spending. A block of funds are allocated to the program and are increased annually according to the capacity of the government to support public spending. For example, funding per pupil could be set in year one and indexed thereafter to the growth of the economy or government revenues. By breaking the linkage between spending and financing this block-funding approach can be viewed as an arbitrary and simplistic. However, if the base figure and indexing factor are acceptable to all parties it can minimize the debate about the appropriateness of funding and introduce a measure of stability into intergovernmental transfers.

This technique has been introduced successfully for determining the federal-provincial transfer payments that help pay for health care and post-secondary education. A similar approach has been used for municipal financing in British Columbia, where revenue sharing entitlements are tied to the funds generated by a mixture of provincial revenue sources.

Before deciding between these alternatives we must examine in more detail the strengths and weaknesses of the present system.

5.B The Fiscal Framework

5.B.1 Introduction

The fiscal framework is the cornerstone of the present funding system. Through this technique the government establishes for each district the recognized cost of the core education program—the level of spending it is prepared to help fund through government grants.

The fiscal framework is detailed and complex—the calculations for a single district take up many pages of computer print-out. However, the essential features are straightforward: school operations are divided into seven broad areas, or functions, and each of these functions is further sub-divided into a number of separate programs. See Table 5.3 for the list of the seven functions and all the programs in function 1.

Table 5.3 The Structure of the Fiscal Framework

The Seven Functions	The Programs in Function 1
1. Instruction (k-7)	1. Kindergarten
2. Instruction (8-12)	2. Grades 1-7
3. Special programs	3. Learning assistance
4. District administration and instructional support programs	4. Language and cultural
5. Operations and maintenance	5. Program Cadre
6. Auxiliary services	6. Library
7. Transportation and housing	7. Counselling
	8. Implementation/in-service
	9. Locally developed courses
	10. School-based administration

For most of these programs the government sets service levels and cost factors. Taken together these generate the recognized level of spending for the program. For example, the service level for classroom instruction in grades 1-7 is one "teacher unit" for every 25 students, for the first 1,600 students in a district. The cost factor is the cost of a "teacher unit" including salary, benefits plus an allowance for supplies and equipment. The fiscal framework amount is simply the sum of the recognized costs of each program.

On a per pupil basis the fiscal framework spending level varies considerably from district to district; from a low of \$3,028 per pupil in Surrey to a high of \$8,166 per pupil in Stikine in 1987/88. Table 5.4 illustrates examples of the variation between districts.

Table 5.4 Variations in Recognized Cost Derived from the Fiscal Framework—1987/88 School Year

District	Cost/Pupil (\$)
Surrey	3,028
Richmond	3,214
South Okanagan	3,788
Gulf Islands	4,516
Central Coast	5,854
Stikine	8,166
Provincial average	3,461

Source: Estimated 1987/88 Fiscal Frameworks and Gross Operating Budgets (Table 2) Ministry of Education, Schools Finance.

In general, instructional service levels are consistent across districts—with some recognition for the higher cost associated with small districts and remote schools. The highest costs can be explained by the transportation and operating costs associated with dispersed school districts and the fixed overhead requirements of districts with low enrolment. Differences in grade enrolment, special education pupils and average teacher salaries are also important in explaining differences in cost between districts.

The detailed calculations of the fiscal framework take on the form of a school district budget with dollars associated with each program. However, the government has consistently stated that the fiscal framework is a funding mechanism only, not a prescribed budget for school boards. For the most part school boards have complete discretion in setting their budgets.

Through its careful and complete calculation of cost differences the fiscal framework has led to a marked re-allocation of resources between districts compared to the old Basic Education Program. For example, the fiscal framework now allocates a larger proportion of resources to the more remote and dispersed districts than the system it replaced. Table 5.5 illustrates some of these changes.

Table 5.5 Impact of the Fiscal Framework—comparison of recognized spending

District	Recognized Spending Per Pupil		
	\$ 1981	\$ 1987/88	% Change
Stikine	3,082	8,166	165
Vancouver Island West	2,650	4,997	89
Nechako	2,602	4,247	63
Nanaimo	2,210	3,236	46
Langley	2,205	3,063	39
Provincial average	2,283	3,461	52

5.B.2 Criticisms of the Fiscal Framework

Since its introduction the fiscal framework has been criticized for a variety of reasons:

- Inadequate service levels: failure to recognize certain activities in the service standards.
- Inappropriate design: funding is based on the number of pupils not on the number of classes that have to be offered.
- Unrealistic cost factors: funding is not based on actual current costs but on those costs recognized by the provincial government.
- Poor incentives: cost-savings by districts can lead to a reduction in recognized costs and, therefore, provincial funding. The fiscal framework penalizes districts for being efficient.
- Distortion of local priorities: the detail and precision of the calculations have had a major impact on local decision-making. For example, in local discussions the fiscal framework has been used as a benchmark for assessing the adequacy of spending on specific programs.

As part of our research, teams visited 15 districts to interview district personnel, teachers and parents about school financing issues. Those interviewed voiced concerns in each of the above areas about the fiscal framework. (A more detailed account is presented in an Appendix). Inadequate service levels were criticized particularly for programs recognized in the framework but not funded. Although the Ministry has identified elementary counselling, district resource centres and extra curricular transport as framework programs, no provincial service levels have been set for them. Consequently, the province does not share in the cost of these programs. To those interviewed, it appeared contradictory for the Ministry to recognize these programs but not to set a service level for them, particularly, as most of the districts visited had a district resource centre, an elementary counselling program and offered extra-curricular transportation to their students.

Inadequate service levels were also cited as a problem in Function 3, Special Programs. The Ministry has recently begun to cap the numbers of students that it will recognize in certain special education programs at a fixed percentage of total enrolment. Districts must therefore assume all the costs for any students identified beyond the cap level.

Many of the districts visited in the interior and the northern part of the province felt that the design of the fiscal framework did not allow them to offer the same quality of program as could be offered in the urban districts of the

lower mainland. The root cause identified was the framework's reliance on district-wide enrolment totals as a basis for establishing most service levels. Insufficient recognition is given to the extra costs of operating a small district with a widely dispersed student population. Not only are driving distances within a district longer, the staffing of small schools presents logistical problems. To avoid adverse effects such as multi-grade classrooms and a very limited course offering at the secondary level, districts must often staff schools at a higher level than the framework recognizes.

Our own research confirms that large districts and districts with few schools do enjoy lower per pupil costs and are able to achieve higher pupil/teacher ratio than small, dispersed districts that operate many schools. While it was recognized by some of those interviewed that the Ministry does not want to encourage the districts to maintain an inefficient network of many small schools, it was felt that school consolidation was often not a viable option for rural districts. Unacceptably long bus rides, new capital costs, and in some instances, the economic demise of small isolated communities were seen as possible results of school consolidations in these areas.

Unrealistic cost factors that caused concern for those interviewed included the use of prior year teacher salaries and standard rather than actual figures for district personnel salaries and administrative allowances.

Many people pointed to Function 5, Operations and Maintenance, as an area where the framework failed to provide an incentive for improving cost-effectiveness. Function 5 is based on the actual cost incurred by the district. There is, therefore, limited incentive to eliminate inefficiencies. Some of those interviewed felt that the Ministry could establish cleaning and maintenance service levels as a basis for recognizing these costs.

Finally, many of those interviewed felt that there remained to be some confusion on the purpose of the fiscal framework. The level of detail and the budget format led some to believe that school districts are supposed to adhere to the service levels set by the Ministry in the fiscal framework. Actual practice varied from district to district—some aimed to meet the fiscal framework levels in their budgets while other simply set their own service standards and counted the provincial grant they received in their revenues.

Many of these criticisms highlight the difficulty of designing a funding formula such as the fiscal framework. On the one hand, the formula should be fair to all districts. To ensure equity, cost factors should reflect the actual experience of the districts. This is intended to ensure that districts that experience legitimately higher costs are not penalized. On the other hand, a formula such as this should reward cost-effectiveness and discourage inefficiencies. To do so, standard costs and recognized levels of service should be included in the formula. In some instances it becomes very difficult to balance the need for equity with the desire for efficiency. For example, while the Ministry may wish to provide a similar quality of education in rural areas as urban, it does not want to encourage districts to keep small scattered schools open if a more efficient pattern is feasible.

Despite the criticisms the level of acceptance of the Fiscal Framework as a funding technique appears to be increasing as School Boards and officials become more comfortable with the new process.

The integrity of the framework has been enhanced by the government's willingness to review suggested improvements. The government has established a Fiscal Framework Review Committee that meets annually to recommend modifications to the formula. This process has worked well—with the government accepting a large number of the changes recommended by the Committee. For example, the large adjustments to the Fiscal Framework for the 1988/89 school year were based on the recommendations of the Review Committee.

Some important issues remain unresolved—notably the perverse incentives in function 5—but the Fiscal Framework Review Committee can and should continue to be the catalyst for change.

The fiscal framework has always been better accepted as a means of allocating funds between districts than as a method of setting an appropriate overall funding level. To perform both roles the formula has to incorporate "appropriate" teacher's salaries. Not surprisingly, this has been particularly controversial and remains the most difficult issue to resolve in a way acceptable to all parties.

5.B.3 Collective Bargaining and the Fiscal Framework

One of the most persistent criticisms of the fiscal framework has been its use of salary levels from the previous year. For example, the fiscal framework for the 1987/88 school year was based on September 1986 salaries. Critics have pointed out, correctly, that by using out-of-date cost factors service levels in the fiscal framework have not been achievable.

During the restraint program, when the provincial government limited school district spending and taxation powers, the policy of using prior year salary levels was particularly frustrating to school boards. The government's compensation stabilization program approved salary increases for teachers even though the fiscal framework made no provisions for salary increase and gave boards no ability to pay increases.

With the return of taxing power on residential property in 1986/87 school boards were able to compensate for the "out-of-date" salary factor in the fiscal framework by levying additional local taxes. Nevertheless, criticism of the salary calculation remained.

The government has now responded to this criticism. Starting in 1988/89 the government is moving away from using prior year district salaries as the primary cost driver in the fiscal framework. Instead, a province-wide average salary will be used for all districts and this salary will be increased by a factor that anticipates salary increases for the fiscal year in question. The annual increase will be tied to a suitable index. The precise index has not been finalized. It will be the subject of discussion between the government and major stakeholders later this year. The changeover to the new system is to be phased in, beginning with a 50/50 combination of the old and new systems in 1988/89.

At the root of the debate about the treatment of teachers' salaries in the fiscal framework is an inherent contradiction between the school funding and collective bargaining systems. Teachers' salaries are the most significant cost factor in public schools and those items driven by teachers' salaries account for 73% of the costs in the fiscal framework. Collective bargaining decisions are made locally between school boards and teachers. Yet, the provincial government, who pays the largest share of any salary settlement, is not at the bargaining table.

Because the government is not a direct player in the collective bargaining process it is reluctant to "ratify" automatically any locally negotiated salary settlement. The government would like the parties to arrive at a settlement within the bounds of the government's willingness to pay. However, over time, there is considerable pressure on provincial funding to keep pace with collective bargaining outcomes. If sufficient funds for teachers' salaries are not included in the financing system, service will be diluted or more costs will be passed on to residential property taxpayers. Any funding system has to come to grips with this problem.

The "payment in arrears" approach was one response to this dilemma. School boards were expected to pay the full first year cost of any salary settlement and the province shared in the cost only in the second year. The practice of recognizing salary increases "in arrears" was not introduced with the fiscal framework. The Basic Education Program system, that was in place prior to 1982, followed the same approach. School boards were expected to use their property tax base to pay the first year cost of any salary settlement with teachers.

The government's proposed new system represents another way of balancing the search for a fair funding system with the realities of local collective bargaining. If an appropriate method of indexing can be found, this new approach may be acceptable to all the parties and will be an improvement over the "in arrears" approach. However, we see some serious potential problems.

First, under the proposed new approach it is possible for recognized salary levels to deviate further and further from actual salary levels. The government will incorporate a projected salary increase into the fiscal framework but will make no adjustment after the fact if actual salary settlements are higher or lower than the projection. If recognized salaries fall below actual salary levels residential property taxpayers will pick up an increasing share of the cost of education.

Second, explicit allowance is not made for movement of teachers on the salary grid. These movements are not small. Over the past ten years average teacher salaries have increased by 120% but negotiated settlements account for only

96%. The balance is explained by the payment of experience and qualification increments and by the lay-off of junior staff. Increases in average salaries caused by movement on the grid have been a significant cost driver for school boards.

Third, by making explicit reference to projected teacher salaries in the funding system the government could make its presence felt in the bargaining arena in a way that will be seen as intrusive and confrontational. There is a danger that the new method of calculating teacher salaries could introduce a new and unnecessary source of friction into the formula.

Finally, by moving to a province-wide average salary, the government will no longer recognize in the fiscal framework differences in salary levels between districts. Average teacher salaries vary from district to district depending on the salary scale, or grid, in each district, and on the position of teachers on their grid. Table 5.6 shows the range in district average salaries as of September 30, 1986. It also shows the range in salaries paid a category 5 teacher at the top of the scale, or grid. As can be seen, there is a wider degree of variation in average salaries than in the grids. Thus, the position of teachers on the grid in a given district greatly affects that district's salary costs. By recognizing provincial average salaries rather than actual district salaries, districts with most of their teachers at the upper end of the salary scale are disadvantaged compared to those with a higher proportion of inexperienced teachers. Also, some districts may have to pay higher salaries to attract teachers to the more remote areas of the province.

Table 5.6 Variations in Teacher Salaries Between Districts—1987

	Average Salary	Grid*
Highest	40,194	43,512
Lowest	33,544	39,680
Difference	6,650	3,832

* Maximum salary in category 5

Nevertheless, we believe the proposed changes are a step in the right direction. The practice of recognizing actual district salaries had serious drawbacks because it concentrated on only one output of the collective bargaining process. The fiscal framework does not reflect other bargaining outcomes. School boards are not compensated for differences in non-salary items. For example, if a school board and its teachers negotiate a small salary increase in return for more sick days or more teacher preparation time, the fiscal framework does not pick up the cost of these non-salary factors. If salaries only are recognized, there is less incentive to bargain for smaller class sizes in return for lower salaries. In addition, a system that recognizes actual salaries implicitly accepts the grid system and provides no incentive for changing that system. Hence if actual salaries are recognised the bargaining process is distorted. This distortion is less acceptable today than it was in previous years because teachers have been granted full bargaining rights.

5.B.4 Suggestions

1. The provincial government should establish a block funding arrangement with school boards similar to that employed in federal-provincial transfer payments. Such an approach would introduce improved predictability and stability to the funding of schools. The formula would ensure that education funding is linked to the growth of the economy. Education would share in the good times and bad but the formula would smooth out the ups and downs of the economy. the government should discuss the design of this formula with the major stakeholders and the formula once established, should remain in place for a period of five years.
2. The government should consider removing all references to teachers salaries from the funding formula. So long as salaries are negotiated locally by school boards the reference to salaries in the formula will always be seen as an intrusion in the collective bargaining system. The block funding arrangement would ensure that an adequate level of funds are channelled into education. It will be up to school boards and teacher bargaining units to negotiate the appropriate allocation of these funds to teachers' salaries.

3. The fiscal framework should continue to be used as part of the funding formula. It is an excellent way of determining how the cost of the core program varies from district to district. However, the fiscal framework should be used to set the relative funding level between districts not the absolute amount.
4. The Fiscal Framework Review Committee should continue to study and recommend structural changes to the fiscal framework. Particular attention should be given to simplification of the formula and restructuring of function.
5. However, frequent changes should be avoided.
5. The government must accept that, over time, the financing system cannot and should not be used as a lever to counteract bargaining outcomes. If the results of collective bargaining are consistently unacceptable, the collective bargaining procedures should be changed, not funding withheld. It is possible that the combination of predominant provincial funding and local collective bargaining may prove to be incompatible; in which case the provincial government will have to look seriously at some form of centralized bargaining similar to that used in the health care sector.

5.C The Sharing Ratio

5.C.1 Background

Determination of the recognized spending level for each district is only the first step in setting the level of provincial operating support. The second step requires the government to decide on the proportion of recognized costs to be covered by provincial grants and the proportion by local revenue, i.e., the sharing ratio. The goal is for grants to be distributed in such a way as to ensure each board is able to provide the core education program without resorting to unduly burdensome levels of taxation. Put differently, grants are allocated such that differences in fiscal capacity and cost do not prevent school boards from delivering the core education program. There is a strong element of equalization in provincial grants.

Today, government grants cover on average 75% of recognized spending but the proportion varies from district to district. Districts with a stronger revenue base receive less support than those with a weak revenue base. School boards finance their share of spending through a tax on residential property. The sharing ratio is calculated in two steps:

1. Each district receives a basic grant equal to 55% of recognized or shareable spending.
2. Each district may receive a shared services grant to assist them fund part of the remaining 45% of their recognized spending. Grants are given in proportion to each district's capacity to raise revenue relative to its needs, i.e., "wealthier" districts receive a smaller percentage funding than "poorer" districts.

The index of revenue raising capacity used to determine the shared services grant is the assessed value of residential property per pupil. The value of residential property in a district directly affects the school board's ability to raise property tax revenue. For example, Kamloops is able to raise \$90 per pupil from a tax rate of \$1 per thousand, less than one third the amount that can be raised by Burnaby using the same tax rate. Figure 5.1 illustrates the grant determination process for three hypothetical districts. Table 5.7 shows the sharing ratios for selected school districts in 1987/88 and the associated revenue-raising capacity of the districts.

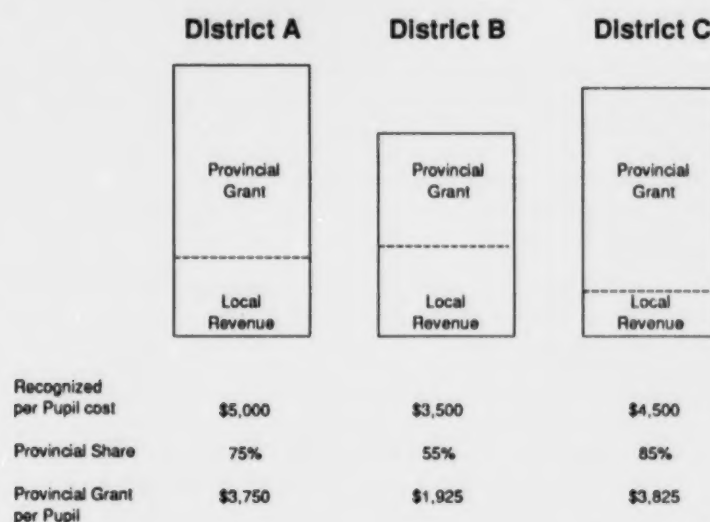


Figure 5.1 Determination of the Provincial Grant

Table 5.7 Sharing Ratios for Selected Districts—1987/88

District	Provincial Sharing Ratio (%)			Revenue Raising Capacity Assessed value/ Pupil (\$ '000)
	Basic	Shared Services	Total	
West Vancouver	55	0	55	553
Burnaby	55	4	59	280
Qualicum	55	14	69	204
Creston	55	22	77	146
Langley	55	26	81	121
Kamloops	55	30	85	90
Fort Nelson	55	35	90	54
Provincial average	55	20	75	170

5.C.2 Findings

The present method of setting the sharing ratio was introduced in 1982 in response to problems with the basic levy system. Under the basic levy approach the local contribution was the amount of money that could be raised in the district from a standard tax rate on property (the basic levy). The provincial grant was simply the difference between the recognized spending level and the local contribution raised by the basic levy.

The basic levy system was simple to understand and could be easily justified on the basis of its apparent equality of treatment: all property taxpayers in the province were taxed at the same rate to support the basic or "core" education program. However, the basic levy system had two significant weaknesses. First, the grant received by a district could change quite dramatically from one year to another in response to fluctuating property values. Second, equity in tax

rates between districts disguised inequity in taxes paid. The average homeowner in Prince George paid the same tax rate as the average homeowner in Richmond but only half of the taxes because property values were so much lower.

These negative features of the basic levy system became pronounced in 1981 when residential property assessments rose dramatically in the Lower Mainland. Provincial grants to Lower Mainland districts were reduced and the divergence in taxes paid between regions grew.

Today's system was introduced to alleviate these two weaknesses while preserving equity in funding. It did this by providing greater stability and predictability to the grant received by a district and by moving away from uniform tax rates toward more uniform levels of taxes paid.

The changes appear to have achieved their objectives. Districts' are guaranteed a minimum grant equal to a fixed percentage of their shareable operating budgets. In general, homeowners in "poorer" districts (those with a lower assessed value per pupil) pay higher tax rates than "wealthier" districts—but still pay lower taxes. Table 5.8 shows some examples of the variation in tax rates between districts together with the gross taxes paid on the average home. If the basic levy system were in place today the uniform tax rate would be \$5.11 per thousand.

Table 5.8 Variations in Tax Rates and Gross Taxes—1987 Tax Year

District	Residential Tax Rate (\$ per thousand)	Gross Taxes on Average Home (\$)
Vancouver	4.81	514
Greater Victoria	5.14	411
Vernon	5.45	304
Prince George	6.02	289
Kimberley	7.59	250
Provincial average	5.11	353

These are the tax rates required to support shareable spending. They are not the full tax rates levied by the school boards.

Source: Ministry of Education

Although the changes appear to have been successful, some problems remain. First, the formula for determining the sharing ratio is not well understood—even by people knowledgeable in the field. This is attributable in part to the complexity of the formula (in the discussion above we have outlined the essential features only), but also to the fact that much more attention has been given to the fiscal framework.

Second, the formula has been changed frequently since it was introduced in 1982: for example, the definition of recognized spending has been expanded to include the Teacher's Pension Plan; the basic grant percentage has been reduced from 60% to 55%; and the threshold level has been changed to allow more of the "wealthier" districts to receive a shared services grant. These changes have been announced to districts at the time they are informed of their annual grant. Very little discussion has been held with school boards prior to introducing the changes.

Third, tax rates to support the core program are, in some cases, substantially different between neighbouring districts. (Table 5.9 provides some examples—next page).

Table 5.9 Variations in Tax Rates Between Neighbouring Districts—1987 Tax Year

District	Residential Tax Rate (\$ per thousand)
West Vancouver	2.91
North Vancouver	5.07
Cowichan	5.29
Lake Cowichan	7.46
Penticton	5.27
Keremeos	7.43

Source: Ministry of Education

In addition, our own research has shown that the new system has had other, unintended, consequences: districts with higher costs per pupil need to levy higher tax rates to support the core program and districts with similar revenue raising capacities can have quite different rates of tax.

In fact, on close examination the variation between districts in tax rates to support the "core" program is almost all explained by differences in cost between districts rather than differences in ability to raise revenues. Tax rates are higher in "poorer" districts not so much because of their low revenue raising capacity but because of the high cost of operating schools in those districts. Table 5.10 illustrates this observation for a sample of districts.

Table 5.10: Tax Rates to Support the Core Program—Comparison of Districts with Similar Revenue Raising Capacities—1987 Tax Year

District	Residential Tax Rate (\$ per thousand)	Revenue Raising Capacity (Prov. Avg. = 100)	Cost Per Pupil (\$)
Saanich	4.76	151	3,530
Windermere	6.55	147	4,398
Cowichan	5.29	86	3,691
Creston	7.33	86	4,575
Mission	5.52	56	3,405
Keremeos	7.43	58	4,821
Terrace	6.86	37	3,971
Central Coast	10.23	39	5,971

The issues surrounding the sharing ratio were not prominent in the briefs to the Commission and in the allocation formula has not been subject to the same debate and scrutiny as the fiscal framework. The British Columbia School District Secretary-Treasurers' Association recommended a simple and appealing approach: the provincial government should pay 100% of the costs of the recognized program. This suggestion avoids the sharing issue and any controversy over district's ability to pay. However, it would require the government to increase provincial funding by over \$400 million. We do not believe this is a realistic option unless other provincial costs are reduced. Since larger provincial grants to school boards would provide tax savings to residential taxpayers the Secretary-Treasurers' proposal could be financed, in part, by elimination of the Homeowner Grant. However, the net result would be a redistribution of the tax burden from higher priced to lower priced homes within each district. We do not believe such a change would be supportable.

5.C.3 Conclusions

The practice of varying provincial grants according to local need and local ability to pay is a well entrenched feature of education finance and one that should be retained. However, the precise methods of determining need and ability to pay have been subject to debate, especially the reliance on assessed property values as a measure of local "ability to pay."

We believe the decision taken to move away from the basic levy system was sound. We agree that assessed property values are not an ideal measure of ability to pay and the funding system should accept some variation in tax rates to support the core program. We also believe the concept of a minimum grant is sensible. Therefore, we support in principle the changes to the sharing ratio in 1982. However, the precise sharing formula is flawed.

Today's grant allocation system generates differences in tax rates between districts for the wrong reason—because of cost differences not "ability to pay" differences. This accounts for sharp differences in tax rates between districts in the same region of the province. Hence the formula should be re-designed. We present a suggested formula in an Appendix.

5.C.4 Suggestions

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1. In establishing the sharing ratio for school districts the provincial government should continue to recognize local revenue raising capacity. The principle of equalization should be retained.
 2. The provincial government should re-design the sharing ratio to ensure that districts with similar capacity to raise revenue levy similar tax rates to support the "core" program. Districts with higher recognized per pupil costs should not be expected to levy higher tax rates.
 3. The provincial government should derive a new index of revenue raising capacity that will generate more evenness in taxes paid by the average homeowner in each district.
 4. Any proposals for change should be discussed with major stakeholders before they are introduced.
 5. The mandate of the Fiscal Framework Review Committee should be expanded to include periodic review of the sharing ratio.
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6. Accountability

Accountability means the obligation to answer for a responsibility that has been conferred. It thus presumes the existence of at least two parties: one who allocates responsibility and one who accepts it with the undertaking to report upon the manner in which it has been discharged. The nature of accountability relationships and the information to be reported will thus depend on who has delegated what responsibilities to whom and on what conditions.

The major players and accountability relationships in the publicly financed primary and secondary education system in British Columbia are illustrated in Figure 6.1. The solid lines show the flow of funding and associated conditions, and the dotted lines show the reciprocal flow of accountability information. Provincial taxpayers provide funding to the Legislative Assembly which, in turn, allocates resources through the Ministry to school districts. Districts in turn allocate resources to public schools within each district. Public schools are thus accountable directly to School districts which are then accountable both to taxpayers within the district and to taxpayers in the Province at large through the Ministry of Education and the Legislative Assembly. Independent schools are directly accountable to the Ministry of Education for the public funds they receive. For the 1987-88 school year, 80% of funding going to school districts came in one form or another through the Ministry; 15% came from residential taxpayers, and the balance from other sources, primarily the Government of Canada.

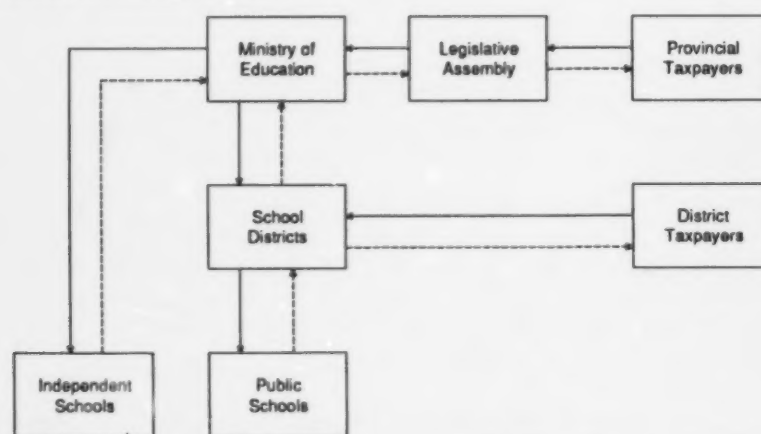


Figure 6.1 Accountability Relationships

What sort of accountability information should be reported in return for public funding? Figure 6.2 illustrates the scope of accountability and the associated accountability information. Broadly, accountability can be divided into two categories, procedural and consequential. The former includes financial accountability—the requirement to provide a complete and accurate financial accounting of the use of public funds—and compliance—the requirement to comply with the various statutory and regulatory authorities associated with public funding. The latter is rather more complex and requires the provision of information on how resources have been used and what has been achieved. The main categories of consequential accountability shown in Figure 6.2 (next page) are as follows: first, efficiency—the ratio of resources used to some standard output or activity measure such as the number of students; second, effectiveness—the extent to which the objectives of publicly funded programs have been achieved; and last and most complex, cost-effectiveness—the linking of a measure of resource utilization, such as cost/student, to a measure of effectiveness, such as the number of school graduates continuing to post-secondary education. In the final analysis the interesting questions all boil down to cost-effectiveness, but the complexity of relating dollars spent to outputs is such that measurement usually starts with approaches to efficiency and effectiveness.

In looking at the two building blocks of consequential accountability and their linking in cost-effectiveness, a very clear order of priority should obtain. Effectiveness means "doing the right thing" and efficiency, "doing the thing right". There is obviously no point in "doing it right" but not "doing the right thing"! So, effectiveness should clearly drive the system. The trick is to be effective, but to be effective as efficiently as possible, in short, to be cost-effective.

Figure 6.2 also contains one other dimension—the scope of accountability information. This is divided into two categories. The first category deals with accountability in one or both of its forms by providing information on the structures, systems, controls, and practices with which management discharges its responsibility; the second builds on this information, and goes further to deal with actual operating results attained by management. Obviously, information on operating results is more complete, but information on the various management structures and processes is an important building block of that information on results and may be more readily available.

The Auditor General of British Columbia audits the financial accountability and compliance of the Ministry of Education on an annual basis. A major comprehensive audit of consequential accountability in primary and secondary education in British Columbia was released in mid-April, 1988, by the Auditor General. This audit focussed on the role of the Ministry of Education in setting objectives, and measuring and reporting costs and effectiveness. The audit did not examine in any detail the accountability of districts, or of schools within districts, or of independent schools. To complement this work, we decided to undertake an accountability study of school districts, with an emphasis on the consequential category of the accountability matrix. The question of procedural accountability was judged to be of less immediate interest for three reasons. First, there was ample evidence, in the form of documents such as operating budgets and annual audited financial statements, that procedural accountability requirements were probably being met. Secondly, several Ministry officials indicated agreement with this assessment. Finally, the emphasis on consequential accountability was judged to be the approach that made the best use of the time and resources available for the study.

A sample of 15 of the 75 districts was chosen. The sample was not drawn statistically, but on the basis of several criteria: physical size, size of budget (in effect, number of students), geographic distribution, and the extent of delegation of decision-making authority to schools. A questionnaire was designed (Appendix 3) and administered in the sample of districts in February and March 1988. In each district, two researchers interviewed the Chairperson of the Board of Trustees, the Superintendent, the Secretary-Treasurer, a representative of the Association of School Administrators, a representative of the Teachers' Association, and a representative of the Parents' Association. The questionnaire addressed the set of management structures, systems, controls and practices by which consequential accountability is pursued in each district, and a number of questions related directly to operating results: the objectives of spending on education, comparative costs by function and program, measures of effectiveness and the overarching issue of cost effectiveness. The findings, conclusions, and recommendations from the comparative district study are set out below.

Scope of Accountability Information	Scope of Accountability				
	Procedural		Consequential		
	Financial	Compliance	Efficiency	Effectiveness	Cost- Effectiveness
Management Structures, Systems, Controls, and Practices					
Operating Results					

Figure 6.2 The Scope of Accountability and Accountability Information

6.A Goals

6.A.1 The Issue

What is the mandate of public spending on education in British Columbia, i.e., what are the intended results or anticipated outcomes of the public resources allocated to education?

The starting point for measuring accountability for results is to ensure that a clear mandate and specific goals have been articulated and understood throughout the public education system.

6.A.2 Background

Section I of the survey questionnaire addressed the goals and objectives of the public education system in British Columbia. The primary purpose of the section was to determine whether British Columbia possessed a mandate and set of goals for public education which had been conceptualized and internalized throughout the system.

The researchers were particularly interested in determining:

- whether a link between the educational goals articulated by the Ministry of Education and the goals determined by school districts and individual schools existed,
- whether a system to ensure constructive input to the educational planning process existed or was perceived to exist by the stakeholders concerned, and
- whether the roles and responsibilities of the various stakeholders were clearly articulated and understood.

In addition, questions were aimed at generating district-level opinions on the roles and responsibilities of the school system for meeting goals beyond intellectual development, and on the roles and responsibilities of other social agencies in providing these services.

6.A.3 Findings

The Ministry of Education has articulated an 'image statement of the educated person', four goals of education and six attributes of a quality school system. This information is contained in the 1986/87 Ministry of Education Annual Report (See: Appendix 2). These three components comprise a framework designed to provide overall direction for the activities of the public education system.

The underlying philosophy and the manifestation of this philosophy into a conceptual framework were not perceived to have been open to public debate. Many of the key players in the education system were unaware of these goals and attributes. Those who were aware tended to express concern at not being consulted, and tended to dismiss the components of the framework as 'motherhood' and unworkable as guiding principles for education. Even those who were aware of the ministry's framework and who had had an active role in its development, did not feel that the components had been entrenched as THE goals and attributes of the public education system.

The primary concern was that the goals were too broad and unmanageable. They were seen to burden the school system with too much responsibility for outcomes over which the system had too little control, and for which the system had too few resources to address adequately.

Intellectual development was acknowledged as the primary goal of the school system. Opinions on vocational development were conflicting; few respondents shared the government's enthusiasm for using schools as vocational training

grounds. Respondents expressed concern that an emphasis on vocational training, particularly in the elementary grades, might encourage students to pursue vocational programs rather than academic programs at too early a stage in their education.

Human and social development were accepted as necessary components of educating the 'whole' person. This was thought to be particularly true today when the institutions that have traditionally addressed such concerns, e.g., the family and the church, are going through periods of transition. It was generally acknowledged that intellectual development cannot be pursued in a vacuum. Respondents noted that a child's basic needs must be met before higher-order learning could take place.

Respondents felt that targeted funding should be provided if the school system were to be held accountable for meeting student needs in the areas of social and human development. The most commonly reiterated limitation of the Fiscal Framework in this area was the lack of financial recognition for elementary school counsellors. Respondents also expressed concern that curriculum addressing human and social development should not be taking already limited classroom time away from activities aimed at intellectual development.

Few systems or structures were perceived to be in place to address the overlapping responsibilities of the institutions and agencies involved in meeting the shared goals of vocational, social and human development.

Individual school districts tended to establish district goals and annual objectives as did individual schools within the districts. Congruence with the ministry's goals and attributes was usually a matter of coincidence rather than design. There was slightly less emphasis on operationalizing the goals and objectives such that achievement could in fact be measured. Respondents noted that the process of operationalizing, monitoring, reporting and evaluating achievement of the documented goals and objectives was a labour-intensive activity for which resources were not readily available.

The secondary school accreditation process was viewed positively by most respondents as a means of establishing school-level objectives and action plans. Support for the introduction of an elementary school accreditation program (which is currently under review) was expressed. In addition, those districts that required schools to submit annual 'School Improvement Plans' documenting educational initiatives for the coming year felt these plans helped to focus educational objectives at the school level.

The Ministry's attributes of a quality school system were generally accepted by respondents. The primary concern was that the main emphasis of the attributes was administrative not educational. Accessibility and relevance were generally valued higher than professionalism, management and accountability, cost-effectiveness and public expectations. It was suggested by some respondents that the latter four attributes could be subsumed under the one heading management and accountability.

The emphasis on meeting public expectations caused some concern. One respondent commented that an informed public was currently oversold on a broad range of programs responding to the individual needs of every child. It was noted that expectations of the public, particularly parents, had been raised significantly beyond what the school system could realistically deliver.

Respondents suggested that stability and diversity be included as attributes of a quality school system.

8.A.4 Conclusions

Consensus on the mandate and goals of the public education system in British Columbia does not exist. In the absence of such consensus it is difficult, if not impossible, to implement a workable system of accountability for the results obtained.

The problem with the ministry's framework has less to do with the content than with the process by which the components were developed. A lack of consultation in the development process has resulted in a lack of ownership of the results. District-developed goals are in many instances not that far removed from those articulated by the Ministry.

Linking the two levels would not be an insurmountable task. It would, however, require a commitment to ongoing consultation.

Districts vary widely in the degree to which locally determined goals are operationalized such that success in meeting the goals can be determined. Ministry leadership in this area and in the areas of monitoring, reporting and evaluating achievements is required.

While it may be relatively easy to link ministry and district goals and objectives, the broader issue of clarifying the roles and responsibilities of stakeholders beyond the immediate education system is a more difficult task. The school system can only be held accountable for the results of activities over which it has direct control and for which it receives direct funding. It is not enough to articulate expectations; realistic constraints have to be recognized and financial implications acknowledged and supported. At present, confusion exists as to the overlapping responsibilities of other ministries, outside agencies and the home in contributing to the education of the 'whole' person. This confusion will need to be addressed before a system of consequential accountability can be implemented.

6.A.5 Suggestions

1. A workable mandate and specific goals for the education system in British Columbia should be developed. The development process should be consultative and cooperative involving all stakeholders: the public, the parents, the ministry, the school boards, the administrators, the teaching and non-teaching staff and the students. Ownership of the results is important to ensure commitment to the next step—the establishment of realistic and specific system goals.
2. The mandate and goals should be visible and entrenched. They should serve to drive most major programs and initiatives undertaken by all stakeholders in the education system. Once established, the mandate and goals should be maintained for a period of five years. This will provide stability to the overall system and an opportunity for longer-term strategic planning at all levels.
3. In addition to the provincial goals, the ministry should set concrete annual objectives reflecting the ministry's commitment to quality education. In keeping with these stated objectives, specific actions, which fall within the ministry's sphere of responsibility, should be documented.
4. School districts should be mandated to develop annual objectives based on the established provincial goals but reflecting local needs and priorities. Action plans, timelines and measures to determine success should be documented. Districts should be audited and evaluated on their success in meeting their established objectives.
5. Schools should be required to develop and submit 'School Improvement Plans'. The activities outlined in the plans should be organized to reflect the provincial goals and the district objectives but with a community-based thrust reflecting the schools' needs and priorities. School districts should audit schools on their success in meeting their improvement plans.
6. The roles and responsibilities of the various ministries involved in meeting the intellectual, social, human and vocational needs of the student should be clarified. A dialogue should be initiated among the following ministries: Education, Social Services and Housing, Advanced Education and Job Training, and Health. Funds should be allocated according to documented spheres of responsibility. The role and responsibility of the home in educating the 'whole' student should also be addressed.

6.B Efficiency

6.B.1 Background

In designing the questionnaire, we devoted considerable attention to questions on the efficient utilization of resources. These questions, directed at both the fiscal framework and actual district expenditure, were intended to provide evidence for conclusions and recommendations on comparative district efficiency.

In the administration of the questionnaire and the examination of district financial statements, the issue of comparative efficiency emerged as rather more elusive than we had envisaged. The findings, conclusions, and recommendations on this general question—relating to the perceived role of the fiscal framework as a basis for governing and reporting resource utilization, and, more generally, the nature of costs in organizations funded by public appropriation—are presented in the following three sub-sections, followed by corresponding treatment of specific questions about the fiscal framework.

6.B.2 Findings

Other than in a few of the larger districts respondents were or claimed to be generally confused as to whether or not the fiscal framework was a prescriptive guide to financial resource utilization or a mechanism to derive a total dollar sum that would be sufficient to provide an appropriate level of education in all of the Province's 75 school districts. In short, respondents were uncertain whether the fiscal framework provided a conditional or earmarked grant, or an unconditional or "block" grant.

Depending on which view a respondent held, the impact of the fiscal framework on district planning and budget preparation ranged from "virtually nil" to "the single most important factor". Respondents who believed that the fiscal framework was prescriptive in nature argued that delays in receiving the fiscal framework from the Ministry, coupled with frequent changes in service levels and cost factors, made school district planning and budgeting very difficult. One lower-mainland Board Chairman noted that two months of careful planning often "went out the window" when the framework was released by the Ministry each year. Conversely, a secretary treasurer in a similar district stated that he couldn't care less when it came down or what the details were as only the "bottom line" was of interest to him.

The varied perceptions of the role of the fiscal framework were echoed in the views of respondents on the question of whether the framework provided a basis for the analysis of comparative district costs. It was pointed out that the Ministry endeavoured in the design of the framework to pre-determine appropriate comparative costs—for each part of the framework, and, by aggregation, total costs for each district—and, in some cases, to specify actual cost standards. Some districts appeared to pay reasonably close attention to those amounts and standards, while others chose to ignore them—quite properly, given the unconditional nature of the grant. So the fiscal framework was found to provide some cost standards, but not to require adherence to them; in short, the framework was found to be incomplete and unprescriptive, and could not be considered to provide a consistent basis for monitoring and financial reporting.

Some districts did see a monitoring role for the framework. One secretary-treasurer claimed that he "tracked every penny" and used the fiscal framework as a means of budget monitoring within the district; most respondents did not use the framework in this way.

The Ministry envisages an important role for the fiscal framework in accountability reporting, and districts are required to provide annual audited financial statements which follow the structure of the fiscal framework. Districts complied without exception with this requirement but generally saw it as a formality which did not constitute an accountability statement on resource utilization in any serious sense. In the first place such financial statements are prepared and audited, quite properly, according to the principles and conventions of financial accounting and reporting, and reveal total expenditures but not the actual costs of programs and activities. Most respondents conceded that the amounts reported under the various heads in the financial statements bore little relationship to actual program and activity

costs. Perhaps reflecting the nature of these reports, it emerged that the Ministry paid no attention to them in any event.

More generally, districts saw their total costs as essentially pre-determined by their appropriation from the Ministry. It emerged that districts are given a budget and that they generally spend all of it. If they were given more, they would spend more, and the whole question of costs and cost control at least with respect to total costs emerged as less than a major pre-occupation at the district level. Indeed, performance accountability with respect to total costs in this situation was viewed by most respondents as an essentially trivial question. The question of relative costs within each district's total was seen by most respondents as potentially more interesting, but was not dealt with in external accountability terms—that is, was not reported externally—at present because of incomplete establishment of standards, the unprescriptive nature of the framework, and the absence of reporting of actual relative (program and activity) costs by districts.

6.B.3 Conclusions

Considerable confusion presently exists as to whether the fiscal framework is prescriptive or unconditional.

Frequent changes to the fiscal framework and late release of the framework each year make district planning and budgeting very difficult.

The fiscal framework does not provide to districts a complete set of cost standards and thus would not, even if it were a prescriptive document, serve as a basis for monitoring and reporting comparative costs.

Present reporting requirements are in financial accounting and reporting terms and do not provide information on the actual costs of programs and activities in any district, far less comparative information.

The very nature of costs in organizations which receive funding as an appropriation from government is debatable. Fundamentally, such organizations are revenue-driven. They are allocated a budget, and, generally, they spend all of it; thus costs are pre-determined. Differences in total cost among Districts reflect primarily differences in the allocation from the Ministry and carry no implications for "resource utilization minimization", that is, comparative district efficiency. In their circumstances as the recipients of an appropriation, there is clearly no incentive for districts to attempt to minimize total costs for some specified effectiveness level; rather, with respect to total costs, the interesting accountability question is what the districts achieve on the effectiveness side with a given budget.

It remains true that within total cost, differences in relative costs (say, for teaching, non-teaching, and central overheads) represent, within the boundaries of management discretion, differences in district preferences and behaviour and thus do provide useful accountability information on resource utilization. Even with an unprescriptive system of appropriation, such comparative information would be useful to the Ministry, the public at large, and district taxpayers. It is not presently collected and/or reported at any level. Consequential accountability is always two-sided; resources are used, and "value" of some kind is provided. In their nature, total district costs provide limited accountability information, but within these totals, information on the actual relative costs of programs and activities would constitute a useful accountability statement on district preferences and relative efficiency, particularly if reported in the context of a complete set of cost allocation procedures and cost standards provided by the Ministry.

6.B.4 Suggestions

1. *The Ministry should clarify the non-prescriptive nature of the fiscal framework.*
2. *Reasonable stability in the cost and service levels in the fiscal framework is necessary to make district planning possible on more than a year-to-year basis.*

3. Recognizing the exigencies of government, the fiscal framework should be made available to districts earlier in the budget cycle if effective planning and budgeting are to occur.
4. The Ministry should provide clear instructions to all Districts on the classification of direct costs and indirect (overhead) costs, and should determine, in consultation with Secretary-Treasurers, a set of procedures for allocating indirect costs to programs which would serve as a consistent basis of program costing to be followed by all Districts.
5. Given a consistent basis of program costing, the Ministry should establish a set of general cost standards or benchmarks for groups of Districts in similar circumstances. To avoid a complex process of standard setting and monitoring, these standards might be addressed in the first instance for groups of similar Districts as the average program or activity cost per student—determined using the consistent set of cost allocation procedures—in each group of similar Districts in the year in which the standards are established. Such standards at the activity and program level should also be aggregated into standards on a relatively small set of general functional categories to be determined by the Ministry in consultation with Secretary-Treasurers. This first, pragmatic, approach to standards should be seen as the first step to a complete set of cost standards (reflecting the appropriate technical, economic, and behavioural information) which should be developed and monitored by the Ministry in consultation with Secretary-Treasurers.
6. Given consistent cost allocation procedures and general standards, Districts should be required to provide to the Ministry on an annual basis a management accounting statement which provides actual costs per student, broken down according to the prescribed cost allocation procedures, in general functions, programs, and activities, the relationship of these costs to the established standards, and an explanation of any variance. This information should also be provided on an annual basis to District taxpayers.
7. Comparative cost information for the various activities, programs, and functions specified by the Ministry for resource utilization reporting purposes should be published annually by the Ministry as a "resource utilization report card" which will permit comparison of each district's performance over time, and performance across districts each year and over time. Further, where consistent patterns of substantial variance persist, they should serve as a basis for discussions with districts on comparative district efficiency, and as one of the variables used to determine appropriate continuing resource allocation levels to districts.
8. The management accounting reports on district efficiency should be provided in addition to the annual audited financial statements which serve to demonstrate procedural accountability.
9. Districts should follow the Ministry lead and should set and require reporting on cost standards for district schools. Such reports would serve as a basis for monitoring and evaluating the comparative performance of Schools in resource utilization.

6.C Effectiveness

6.C.1 The Issue

What is actually achieved by the education system in British Columbia, i.e., are the goals of the education system operationalized such that outcomes or intended results can be measured?

Effectiveness is a central concern in all parts of the public sector. By effectiveness in education we mean the extent to which the stated goals and objectives of the education system have been realized.

6.C.2 Background

In January 1986 a discussion paper entitled *Evaluating the Progress of Schools: Indicators of Quality* was issued by the Ministry of Education. The paper, prepared by a committee of superintendents and Ministry staff, proposed a conceptual framework for the development of a comprehensive evaluation model for the education system of British Columbia.

The evaluation model was based on the Ministry's goals and attributes outlined in Appendix 4. A set of quality indicators intended to measure the extent to which the goals and attributes of the education system were being achieved was set forth. In addition, an interpretive framework was outlined suggesting that any interpretation of the indicators should consider four perspectives: the social and economic context of the community, changes over time, comparisons with other jurisdictions and comparisons with standards defined by professional educators.

As a result of the discussions surrounding the paper, a decision was taken to pilot the evaluation model in 12 school districts during the 1986/87 school year. The pilot was completed in December 1987. Six of the pilot school districts were included in the district sample for this accountability study.

Section IV of the accountability study questionnaire addressed the issue of effectiveness in education. The primary purpose of the section was to identify available measures of educational outcomes, e.g., Provincial Learning Assessment Program results, Grade 12 examination results, etc., and to ascertain their perceived validity and reliability as measures of educational effectiveness.

In addressing effectiveness in education a number of questions were raised:

- How can accountability for results be implemented given the broad range of expectations placed upon the education system?
- Are the goals and objectives of the education system operationalized such that outcomes can be measured?
- What intangible/qualitative benefits of education exist, and how can these benefits be recognized when measuring effectiveness?
- What environmental factors influence educational performance, and how can such factors be accommodated in a system that monitors educational effectiveness?
- Do standards or targets exist to ensure quality in education is being maintained and/or improved?
- Who has the primary responsibility for monitoring, reporting and evaluating educational outcomes or results?

The questionnaire attempted to elicit district-level opinions on many of the above questions.

6.C.3 Findings

The costs of measuring educational effectiveness are high; those districts involved in the Ministry's pilot evaluation project found the process very resource intensive. Some also felt results begged more questions than they answered. It was generally agreed that evaluation was an important initiative but that resources and expertise were required to ensure accurate, defensible results.

Many of the quality indicators that were identified and tracked for the evaluation project were not seen as valid or reliable measures of the documented goals and attributes, e.g., withdrawal and retention rates as measures of accessibility. The results of the project questionnaires that were circulated to parents, employers, teachers, students, and school leavers were relied on heavily as indicators of effectiveness although the information gained was subjective in nature. The views of the non-parent taxpayer were not solicited.

Of the Ministry's goals and attributes, only intellectual development was viewed by district respondents as having been operationalized such that achievement could fairly be assessed. Respondents felt that the key performance indicators were the Provincial Learning Assessment Program (PLAP) results (grades 4, 7 & 10), the Grade 12 provincial examination results and, where used, the Classroom Achievement Tests. Graduation rate (using the Dogwood diploma standard) was also accepted as a valid and reliable measure of educational effectiveness. Most districts had systems and procedures for monitoring and reporting these performance measures. Other than provincial means, few districts set formal standards or targets for evaluating the outcomes achieved.

Because Grade 12 provincial examination results are marked on the bell curve, the reliability of the measure for comparisons over time was questioned. One respondent noted that it was impossible to measure improvement when the measures were relative not absolute.

Many of the indicators currently used in the system are considered intermediate, explanatory variables, not valid measures of educational results or outcomes, e.g., pupil/teacher ratio, class size, attendance rates, retention rates, withdrawal rates, etc. In addition, the reliability of certain measures was felt by some respondents to be constrained by the lack of standard definitions and the inconsistent application and interpretation of the results, e.g., school marks, graduation rates, retention rates, withdrawal rates. (Withdrawal rates can be completely skewed by schools on the semester system).

Respondents, other than teachers, felt that class size and pupil/teacher ratio were intervening variables related more to positive teacher morale than educational achievement. Class composition, a measure which incorporates class size and student mix, i.e., the diverse academic and behavioral characteristics of students in the class, was a more telling variable, but it was still not perceived to be an outcome measure. A number of respondents noted the negative impact that mainstreaming (the integration of special education students into normal classrooms) had on educational achievement. Conflicting opinions on the appropriateness of integration existed.

The following intangible/qualitative benefits of the education system were identified: student and teacher morale, reliability/dependability, self-esteem, self-worth, self-discipline, school climate and spirit, curiosity, motivation, self-confidence, pride, social skills, healthy lifestyle and citizenship. Ways of recognizing and accommodating these benefits in a system that measured educational effectiveness were not readily identified.

The following environmental factors were seen to influence educational outcomes negatively:

- unstable home environment
- low or obvious disparity in socioeconomic status
- high unemployment
- low sociocultural expectations regarding educational and career achievements
- high incidence of native, ESL, or special needs populations
- geographic factors that necessitate bussing (negatively influence involvement in extracurricular activities)
- transient population
- absence of pre-school preparation
- high teacher turnover, young inexperienced teachers
- remoteness and isolation
- incidence of rural schools with split classes.

Few constructive suggestions were offered for controlling these variables when measuring educational effectiveness.

Innate ability was seen to have an important impact on measures of educational effectiveness. Many respondents felt that aptitude/ability testing should form the baseline for evaluation of student performance. One respondent noted that students in special education programs have individual educational plans developed annually. These plans document educational goals and plans for meeting the goals. Reasonable expectations and outcomes based on the student's ability and disability are an essential part of the educational plan. Educational plans for all students were suggested as a possible means of controlling for innate ability in student evaluations.

There was general unease that the Ministry would use performance information to rank districts. Respondents were more comfortable with using the indicators at a district or school level as tools for self-improvement. If ranking was to occur, districts were adamant that they be given an opportunity to document the local anomalies that serve to explain district- or school-based variation from established standards or provincial norms.

The Ministry was seen to have an important role in developing defensible measures of educational effectiveness for the Province. In addition, respondents stressed the importance of establishing locally determined measures of educational effectiveness based on district priorities.

6.C.4 Conclusions

The public education system requires stability, not only in terms of its funding base but also in terms of its anticipated results or expected outcomes. One means of ensuring stability of results is the implementation of a system-wide accountability framework that evaluates the various stakeholders on the consequences of their activities. Such a system does not currently exist. The starting point is widely accepted system goals. From there, operational objectives need to be determined and measurable outcomes documented.

It is important that recent initiatives such as the Ministry's pilot evaluation project not lose momentum. This initiative can form the basis of a provincial policy on evaluation and accountability in education.

There is no stand-alone indicator of educational effectiveness that is perceived to be both valid and reliable. The range of quantitative indicators aimed at measuring intellectual development needs to be broadened to include such measures as participation in the International Baccalaureate Program, and post-secondary participation and achievement rates. Measures to assess vocational development need to include such indicators as employment success and participation rates in reentry and job training programs.

Measures to assess social and human development that are more objective than perception-driven questionnaires are required. The possibility of incorporating questions that reflect the affective domain in the Learning Assessment tests is worth exploring. Other possible measures include: incidence of vandalism, costs associated with vandalism, suspension rates, Young Offenders rates, drug and alcohol-related problems, and incidence of mental health interventions.

Defensible indicators to assess the Ministry's attributes of a quality school system are also required. Possible measures include:

Accessibility

- participation rates by minority groups
- integration rates for special needs students

Relevance

- range of electives offered

- participation rates in electives
- dates of curriculum revisions

Professionalism

- teacher evaluation outcomes
- professional development activities
- level of teacher certification/experience

Management and Accountability

- existence of a strategic planning model
- existence of a framework/system for monitoring and evaluating goal-related outcomes

Cost Effectiveness

- cost per graduate (grade 1-12) using Functions 1—3 of the fiscal framework
- maintenance, cleaning or heating costs per square metre

Public Expectations

- questionnaires to measure satisfaction including the non-parent taxpaying population.

There is an important role for existing and emerging technologies in the efficient monitoring, reporting and evaluating of educational outcomes. The information relating to educational effectiveness that is currently generated by the Ministry of Education is not fully understood or effectively used. Before increasing the amount and sophistication of information generated, it is necessary to ensure a better understanding of data collection and information management, interpretation and utilization.

Any system for measuring outcomes or results has to be sensitive to the fact that when a system is monitored, performance tends to improve. Without jeopardizing the stability of the system, it is important to vary measures over time to ensure that selective monitoring does not skew the accuracy of the results.

6.C.5 Suggestions

1. Provincial policies on evaluation and accountability in education should be reviewed and clarified.
2. The Ministry should continue to support the program evaluation initiative with increased financial resources and expertise at the school district level.
3. Defensible measures of educational effectiveness that directly reflect achievement of the provincial goals and objectives for education should be developed. The development process should be consultative and cooperative providing the opportunity for school districts to establish local quality indicators in addition to province-wide measures. Efforts to develop a comprehensive multivariate indicator of educational effectiveness should be pursued.
4. Ongoing systems for monitoring and reporting information on the attainment of educational objectives at the Ministry, district and school level should be in place.

5. The Ministry should mandate school districts to report outcome data in addition to financial data. It is recommended that school districts be required to publish Annual General Reports to communicate educational results both to the Ministry and to the districts' constituents. The reports should follow the Ministry framework, i.e., based on documented goals, outcome measures and financial performance. Ministry assistance in developing a report outline or shell would be useful.
 6. Individual educational plans should be developed for all students. Teachers should use these plans to monitor and evaluate individual student achievement.
 7. Where appropriate, measures of educational outcomes or results should have standards and performance targets. These should be determined on a district level and should allow variances between schools based on documented anomalies in student populations and school catchment areas. The standards should be criterion-based not reference-based.
 8. Any inter-district rankings should compare peer group districts, i.e., districts that share similar characteristics such as enrolment, size, geography, urban/rural mix, SES, etc. Any comparison of educational outcomes should be interpreted with caution due to lack of standardization in the way some measures are determined, monitored and reported.
 9. All data collected by the Ministry should be keyed to the goals and attributes of the education system. Efforts to develop a collaborative data base in conjunction with other ministries would be useful in providing common information for a variety of applications, e.g., measuring human and social development.
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6.D Cost Effectiveness

6.D.1 The Issue

Can the resources utilized in the public education system be linked to the educational outcomes or results achieved, i.e., can the cost-effectiveness of educational funding be measured?

Cost effectiveness in education refers to the use of financial, human and physical resources such that anticipated educational outcomes are maximized for any given set of inputs, or, conversely, that inputs are minimized for any given quantity and quality of outcomes. Efforts to relate resource inputs to performance outcomes are required to permit informed responses to complex resource allocation questions.

6.D.2 Background

In the article, 'Elementary and Secondary Education Policy in Canada: A Survey' (Canadian Public Policy, XII:4), author Bruce Wilkinson notes that since expenditures on public education in Canada have increased in spite of substantial declines in student enrolment. Wilkinson reviews the current literature and concludes that the "quality in education as measured by the achievements and capabilities of students, does not appear to bear any consistent relationship to the dollars spent on education by different schools or school districts, or to the various direct inputs that these dollars can buy, such as teachers with more education or lower student-teacher ratios (p.543)."

The absence of empirical evidence to support the argument that increases in educational funding are required if improved educational performance is to be achieved, shifts the burden of proof to those wishing increased funding to somehow demonstrate improved results. Increasingly, the willingness to allocate scarce public resources for educational programs will be tied to indicators of measurable impact for funds spent, i.e., measures of cost effectiveness.

The Ministry of Education's 1986/87 Annual Report attempted to address the issue of cost-effectiveness in the provincial education system. The report identified the weak link in any effort to measure cost effectiveness—the absence of valid and reliable measures of educational outcomes and the difficulty in determining the relationship between input measures such as cost per pupil and educational outcomes. Having acknowledged the weaknesses, the report did plot direct operating expenditures per pupil in each province against the percentage of the appropriate age cohort who were high school graduates. Although it is necessary to interpret the figures with caution, such a comparison does suggest the Ministry's commitment to finding meaningful ways to link resource inputs with educational outcomes.

Section V of the survey questionnaire addressed the issue of educational cost effectiveness. The primary purpose of the section was to explore possible measures of cost effectiveness for the educational system. It was hoped that efforts by individual school districts to link resources allocated to outcomes or results anticipated could be identified and assessed.

6.D.3 Findings

There was little consensus on how to measure educational cost effectiveness. Districts were generally threatened by the idea and saw little benefit to be gained from focussing limited resources on such activities.

Respondents noted that if a system to measure and monitor cost effectiveness were to be implemented, the responsibility for developing the system should be shared between the Ministry and the school districts. Primary responsibility was felt to lie with the district. While the Ministry was seen to have a leadership role in developing valid and reliable cost-effectiveness measures, there was little support for the idea of the Ministry using such information to rank order or compare districts or schools. Respondents were more comfortable with the measures being used by districts and schools as tools for self improvement.

The indicators of educational cost-effectiveness identified for the pilot evaluation project were not perceived to be valid measures. Respondents generally agreed that operating cost per pupil (by function) was an inappropriate measure because desired outcomes were assumed rather than measured, and variations in school district size and characteristics were not controlled. In addition, the subjective perceptions of those surveyed, although providing some indication of stakeholder satisfaction, were not seen to provide defensible measures of cost effectiveness. Suggestions for alternative measures of cost effectiveness were not forthcoming.

Few districts attempted to link resources to anticipated educational outcomes in their budget development processes. A number of school districts did cost out program alternatives in order to permit informed decisions about resources allocated, but these costs were not directly linked to program results.

6.D.4 Conclusions

It is no longer enough for the Ministry to audit school districts' financial statements. It is necessary and appropriate for the Ministry to monitor and audit the return on overall resources allocated, i.e., educational cost effectiveness.

The process of establishing mutually agreed-upon goals, operationalized objectives and measures of outcomes or results is a necessary pre-condition to measuring cost-effectiveness. Linking costs to outcomes will be a less threatening and more attainable initiative once agreement is reached on what the intended results of the education system are and should be.

Monitoring and reporting cost effectiveness information will also be less threatening if the emphasis is on improving an individual district's cost effectiveness, rather than on whether a district is cost effective, relative to other districts.

A system linking resource inputs with intended educational outcomes needs to be developed for use in the resource allocation process at the provincial level and in the budget development process at the school-district level. Once in

place this system would permit informed analysis of whether or not additional funds are in fact correlated with measurable improvements in education system outcomes.

Value-for-money is, in the final analysis, about cost-effectiveness. Development of cost-effectiveness information on how well money is spent is critical to determining how much money should be spent. It is important that the process start with agreement on effectiveness information, and continue at the Ministry and district levels with the linking of such measures to resources utilized. It is no longer enough to assert the desirable consequences of funding increases; a means of measuring the consequences of funding decisions on educational effectiveness is required.

6.D.5 Suggestions

1. *The Ministry should pursue its initiative in linking effectiveness measures to resource utilization measures, and should publish annually district information linking standardized operating cost per student with a selection of effectiveness measures for all districts. It should also make clear to districts that it is intended in the longer run to use such information to evaluate district performance and as a variable in the determination of both the appropriate level of resource allocation to districts, and the nature of the conditions to be attached to that allocation.*
2. *The Ministry, the districts and, where appropriate, the schools should be systematically audited and evaluated on how well their objectives have been met and at what cost.*

6.E Structures and Processes

6.E.1 The Issue

How do the management structures, systems, controls and practices by which consequential accountability is pursued in the school districts contribute to or detract from the effectiveness and efficiency of the school system?

6.E.2 Background

Section 2 of the questionnaire addressed the extent to which the school district's organizational structure and management processes were perceived to contribute to or detract from its effectiveness and efficiency. A number of other issues, not covered in the questionnaire but relevant to system effectiveness and efficiency, were identified in the course of the interviews, in briefs to the Commission from the districts and organizations representing major stakeholders, and in the 1988 Annual Report of the Auditor General of British Columbia. These issues included the following:

- Is school-based management a more effective and efficient structural option?
- How much autonomy should school districts have?
- What role should parents play in the system?
- Are policies and procedures regarding special education integration being implemented effectively and efficiently?
- What qualities of leadership are required for the effective and efficient management of the system?

The effectiveness and efficiency of the management processes in any large organization can be examined with reference to several broad management categories. The categories used in the questionnaire were as follows:

- General management, including (1) the establishment of goals and objectives and (2) the formulation, implementation and evaluation of plans, strategies, programs, policies, procedures and systems related to those goals and objectives;
- Financial management, including budgeting, control and auditing;
- Purchasing and procurement, including the acquisition, storage, use and disposal of goods and services.
- Operations and maintenance, including the acquisition, development, operation, maintenance, and disposal of physical assets; and
- Personnel management, including recruitment, training, compensation, employee services, supervision, staff development, working conditions and employee relations.

The interviews included questions asking the respondent to rate the impact on efficiency and effectiveness of the district's organizational structure and of its plans, strategies, policies, procedures and systems in each of the five management categories, as follows:

- general management plans and strategies;
- general management policies, procedures and systems;
- the budget preparation process;
- financial management;
- purchasing and procurement;
- operations and maintenance; and
- personnel management.

The purposes of these questions were primarily to elicit comments from the respondent and secondarily to discern whether there appeared to be any pattern of response, for example whether the perceptions of the superintendents were markedly different from those of the teachers.

The criteria used as points of reference in examining the school system's management structures and processes were drawn from the literature on value-for-money (comprehensive) auditing. There is a presumption that the satisfaction of these criteria ensures that the structures and processes either contribute to or do not detract from the effectiveness and efficiency of the organization. The available time and resources did not permit the kind of detailed study that would be undertaken in a full comprehensive audit, so that the criteria serve only as general guidelines rather than a checklist. The criteria are summarized in Appendix 5.

6.E.3 Findings

Of the fifteen districts that we visited, two had a dual reporting structure in which the superintendent and the secretary-treasurer report independently to the board and have equal status in the organization. The other thirteen districts had, since about 1980, moved from a dual structure to a unitary one in which the superintendent is the chief executive officer and the secretary-treasurer reports to the superintendent. In practice, we found that the secretary-treasurer in

several of the districts still reports directly to the board as well as to the superintendent. Perhaps because of this, a few teachers in districts with a unitary structure still perceived it to be a dual structure.

In the interviews, we asked the respondents to rate what in their opinion was the nature of the impact of the organizational structure on district efficiency and effectiveness. Approximately 80% of those who answered the question said that they felt it had a positive impact, while the remainder said that it had either a negative or no discernible impact. There were no marked differences in the ratings between the dual and unitary structures, including those which had established a school-based management system. Negative ratings were given only by several school administrators and teachers, and by one parent. Of these, one said that there were too many district office staff, one criticized overlaps in program responsibility within the district, one cited district size as the main impeding factor, and four were critical of the way in which the structure was administered rather than of the structure itself. Several of the larger districts have a substantial number of central office staff positions allocated to the provision of educational support services in such areas as curriculum, special education and research.

Two of the fifteen districts we visited had established a system of school-based management. S.D. 35 (Langley) implemented the system to improve management decision-making and accountability. S.D. 59 (Peace River South) introduced their system more in response to the geographically dispersed nature of the district. In Langley, authority is delegated to the school administrator with respect to personnel, equipment, maintenance and supplies, while the central office retains authority over utilities and expert services. These delegations of authority have been organizational or bureaucratic rather than political in nature, i.e. there has been no system of school-based governance established. In this sense, there is no real difference between these and other districts in terms of political accountability to the taxpaying electorate.

Those who were involved in the school-based management system found it, with some reservations, to be a good one. The concern raised by some critics of school-based management, that the principal and staff wind up spending too much of their time on administrative tasks and not enough on their educational duties, was found to be supported by several of the respondents. Respondents in several of the other districts we visited indicated that they were moving in the direction of school-based management. Some other districts, while stopping short of a full-blown school-based management structure, were endeavoring to delegate more authority to the principal in such areas as school-based goal setting, planning and purchasing.

The question of school district autonomy was raised by several respondents and in a number of briefs. The general thrust of the arguments was that the system has become too centralized, especially since the onset of the restraint period, and that there should be a return to a more decentralized structural arrangement. For this to be implemented successfully, it would first be necessary to define the respective roles and responsibilities of the Ministry and the districts in more detail than they are at the present time.

The parental role in the educational system was raised in several interviews and in a number of briefs. One respondent felt that parental involvement had probably decreased over the past thirty years because of societal changes and increasing system complexity or incomprehensibility. The briefs indicated broad agreement that there is an important role for parents to play along the lines suggested in the Commission's report on Parents in Education. We found no evidence, however, that the financial implications of this involvement had so far been examined.

The respondents in each district were asked about what kinds of plans and strategies they had for achieving their goals and objectives. Most respondents indicated that their district had annual plans associated with annual goals and budgetary priorities. Respondents in six districts indicated that they also had long-term plans in place, usually three to five years. Respondents in five districts said that they had no long-term plans. In four of the districts, there was a division of opinion among the chairperson, superintendent and/or the secretary-treasurer as to whether or not the district had long-term plans, apparently because they had different definitions of what constitutes a long-term plan.

Several respondents and a number of briefs referred to a need for provincial leadership in long-term planning. Areas in which such a need was identified included curriculum, human resources, facilities and finance. Several respondents stressed the importance of a stable funding mechanism. One brief raised the issue of economy in site acquisition, noting that, in a growing district, a failure to acquire sites for new schools sufficiently in advance of need too often resulted in higher costs for less appropriate sites. In another district with declining enrollment it was found that a number of

school facilities, several of which were relatively new, had been leased to other users rather than being sold, at least in part because the rental revenues accrued to the district while sales revenues would have reverted to the Province.

The respondents' assessments of their school district's management processes were generally positive. Over 80% of those who answered the question indicated that, in their opinion, their district's plans and strategies had a positive impact on its efficiency and effectiveness. None of the respondents felt that they had a negative impact.

Similarly, over 80% of the respondents felt that the district's general policies and procedures also had a positive impact, although in this case several stated a negative opinion. Reasons given for the negative assessments included criticism of the policy development process, the view that documented policies can be too constraining on management, poor policy implementation, and inefficient use of time in the consultative style of policy development. It was found in reviewing policy and procedures manuals in a number of districts that they were out-of-date and, in some cases, appeared to be excessively lengthy, detailed and/or not used in practice.

An issue regarding the implementation of special education integration policies was raised by several respondents and in a number of briefs. The general import of the arguments was that the BC government should make a statement on how far integration should go. One brief noted that little or no information has been gathered on the effectiveness of these approaches. It was felt that teachers too often did not have the necessary resources of time, training and/or supplementary support to respond adequately to the needs of the special education student while still devoting adequate time to the other students in the class, especially where behavioral disorders were involved.

The district's budget preparation process was judged to have a positive impact on its efficiency and effectiveness by over 65% of the respondents who answered the question. A substantial number of respondents registered negative opinions, the reasons for which included the time-consuming inefficiency of the process itself, the negative impact on effectiveness of program cutbacks, a negative impact on teacher morale, lack of staff participation, the negative impact of the fiscal framework in dictating priorities, and the lack of a link to district goals. We found that a number of districts go through a fairly elaborate budgetary process, including setting annual goals and consulting widely with staff, parents and the public. The Ministry's failure to announce the fiscal framework in a timely fashion was criticized by many respondents.

Approximately 80% of those who responded to the question indicated that, in their opinion, the district's financial management practices had a positive impact on its efficiency and effectiveness. Reasons given for the few negative assessments included a lack of meaningful teacher input and policies and procedures that were out of date or unduly bureaucratic.

About 75% of those who responded to the question felt that district purchasing practices had a positive impact on efficiency and effectiveness. Five of the seven respondents who registered negative opinions were school administrators. Reasons given for negative assessments included bureaucratic time delays and a sense that there must be a better way of getting supplies to the schools. The Ministry's textbook allocation system was also criticized by several respondents. A few respondents mentioned that "buy local" policies sometimes meant that goods or services were not obtained at the lowest possible price. In a number of districts, the respondents indicated that efforts were being made to place more authority over purchasing in the hands of the school administrators. One district had introduced a system of purchasing vouchers that principals could use like scrip to make purchases from local suppliers.

District operations and maintenance practices were positively rated by more than 75% of those who responded to the question. Five of the nine respondents who registered negative opinions were school administrators. Reasons given for negative assessments included poor responsiveness, excessive central administration, restrictive policies, general inefficiency, poor communications regarding schedules, incomplete projects, the lack of a policy for turning over capital equipment, union constraints, and insufficient resources. The negative assessments were concentrated mainly in three districts in one of which the superintendent also registered a negative opinion but where, in all cases, the secretary-treasurer made a positive assessment. Several respondents also expressed concern about the long-term maintenance of their facilities, particularly in those cases where the district had cut back during the restraint period.

Over 75% of the respondents rated district personnel management practices as having a positive impact on its efficiency and effectiveness. Six of the nine people who gave negative assessments were teachers, whose reasons included in-

adequate policies, insensitive administration, arbitrariness, too many unilateral decisions, poor communications, excessive disruption over issues, and an understaffed personnel department. Reasons given by senior managers for their negative assessments included low class sizes, inefficiency and union seniority rules. Several teachers mentioned transfer policy as an issue and one superintendent observed that this was a question of management rights. Several respondents and briefs suggested that teachers should be bargaining collectively at the provincial level.

On an overall basis, the chairpersons and senior managers gave negative ratings to district management practices in only a very few cases. About 15% of the school administrators' ratings and 25% of the teachers' ratings were negative.

Respondents were also asked if an operational review of the district had ever been conducted by an external body. Such a review had been conducted in seven of the districts. Except in one case, where the Board apparently refused to accept the reviewer's recommendations, the review was seen to have yielded beneficial results. One other district indicated that a review was being planned. The other seven districts, several of which were relatively large, had no plans for a review.

Many of the respondents and a number of briefs emphasized the importance of effective leadership in the school system, beginning with the Ministry. The general consensus in the field appeared to be that the Ministry has not provided this kind of leadership and that, as one brief put it, the provincial government should "... show leadership in the development of participatory planning in educational issues that will build cooperation, trust and harmony among the major players."

The quality of leadership given by boards of trustees was not directly addressed in the interviews nor in the briefs. However, we found that some board chairpersons did not appear to be as knowledgeable about school finance and the management of their districts as might be reasonably expected. One respondent noted that there is no training or orientation program for board members of the kind that the B. C. School Trustees Association might sponsor.

The superintendents we interviewed were, on the whole, impressive in the evident qualities of leadership they displayed. Their leadership styles varied—most of them appeared to tend towards a democratic, more consultative approach, while several were perceived by others in the district to take a somewhat unilateral approach to decision-making. In one case, the superintendent's approach was seen by some respondents to be too consultative, time-consuming and inefficient.

The principal was portrayed by several respondents and in a number of briefs as the key person in the system, the one who sets the tone of the school. The consensus appeared to be that a cooperative, "enabling", creative approach would most likely have a positive impact on school climate, morale and, presumably, classroom effectiveness.

6.E.4 Conclusions

It would appear that most people in the districts find no serious faults in the districts' organizational structures. Although some of the larger districts appear to have a relatively large central office staff component, it cannot be concluded that these or any of the other district central offices are unduly "top heavy", since the growth of district staff groups can possibly be attributed, at least in part, to attempts to fill roles that were perceived to be inadequately filled by the Ministry. If the Ministry were to assume a more active role in providing central leadership in educational services, it may be that the size of the centralized staff groups in the districts could be reduced.

It cannot be concluded on the basis of the evidence that school-based management is a more effective or efficient structural alternative. In principle, however, there is a strong case for "letting the manager manage" and delegating to the school administrator sufficient authority to enable the school to perform more effectively and efficiently. On the same basis, there would appear to be considerable merit in delegating to the districts as much management authority as possible.

There appears to be a strong case for strengthening the parental role in the system, one which can conceivably have a beneficial impact on its effectiveness. It is important to carefully plan the nature and extent of this role with respect to the relationship between these benefits and the costs that would be incurred.

Strategic plans for achieving organizational objectives are essential to the effectiveness of the organization. There is no consistent approach to strategic planning within the school system and an apparent need for Ministerial leadership with respect to long-term strategic planning. A stabilized funding mechanism is needed. A life-cycle approach of the kind recommended for facilities management by the Auditor General could be extended to embrace the whole area of school site planning, acquisition, development, operation, maintenance and disposal.

In some cases it appears that the senior managers have a much more favorable view of the quality of district management than do those further down the line. On the whole, however, it appears that most of the key players in the districts find no serious faults in the districts' management processes in each of the five management categories used in the interviews. Exceptions to this conclusion may include the perceptions of school administrators with regard to purchasing, operations and maintenance, and of teachers with regard to personnel management.

In some cases, deficiencies in policy and procedure manuals could be having a negative impact on efficiency and/or effectiveness where decisions appear to be arbitrary or "stupid" rules appear to supersede good judgement. A good set of policies and procedures is an essential tool of effective and efficient system management.

Poor implementation of special education integration policies can have a negative impact on classroom performance and system effectiveness. It appears that there is a case for stronger Ministerial leadership in this area and for a review of district policies and procedures, taking into account the benefit to the handicapped child and the benefits and costs to the other children in the classroom, to the teacher, to classroom performance and to system effectiveness.

The Ministry's failure to announce the annual fiscal framework allocations in a timely fashion is seen by many districts to hamper their efforts to establish a stable budgetary process. The primary concern would appear to be with establishing annual ceilings on spending and local taxation increases rather than with detailed program planning.

Purchasing and procurement administration is centralized in most districts, although a number are attempting to delegate more authority to school administrators. Contemporary management information systems can provide for both decentralized decision-making and centralized monitoring and control. A decentralized decision-making system tends to enhance responsiveness to needs, accuracy and timeliness of delivery, and thereby contributes to the efficiency and effectiveness of the system. Centralized purchasing is justified primarily where economies of scale clearly outweigh the risk of failing to provide efficiently what is needed to enable teachers to perform effectively.

Maintenance administration is centralized in most districts and, in two or three of the districts we visited, may be detracting from the district's efficiency and effectiveness. The general principle of decentralizing responsibility while maintaining centralized monitoring and control, except where there are obvious economies of scale, can also be applied to operations and maintenance, as the experience of districts with school-based management systems suggests. It is worth noting that the Auditor General called for the Ministry to provide better information about facilities operations and maintenance, thus implying a need for better management information systems.

There appears to be a need for many districts to improve personnel management policies and procedures with respect to content, implementation and evaluation. Collective bargaining agreements may incorporate remedies to some or perhaps all of the deficiencies. Given the perceived difficulties of implementing present collective bargaining policies, there appears to be a good case for considering the alternative of Province-wide collective bargaining with regard to teacher's compensation and other items whose financial impact is significant.

A periodic review of organizational operations of the kind conducted in a comprehensive audit can contribute positively to the organization's effectiveness and efficiency. There is no provision for systematically conducting periodic reviews of this kind in the school system.

Effective leadership is essential to organizational effectiveness. Those in positions of leadership as school trustees need to be well-informed and knowledgeable about the school system as a whole. The superintendents and school ad-

ministrators are generally perceived to hold the key positions of administrative leadership within the system. It is essential that these positions be filled by effective leaders.

6.E.5 Suggestions

1. The Ministry should give careful consideration to proposals for increased decentralization of the school system structure and, in consultation with the Districts, clarify in greater detail their respective roles and responsibilities.
2. Districts should give careful consideration to proposals for increased decentralization of the school system structure, particularly with respect to the delegation of authority to school administrators.
3. Measures to promote greater parental involvement in the education system should be carefully planned so as to ensure that this involvement contributes to the system's effectiveness and efficiency.
4. The Ministry should take the lead in developing long-term planning policies, procedures and systems for the school system. The funding mechanism should be stabilized and consideration should be given to using a life-cycle approach in school site planning, acquisition, development, operation, maintenance and disposal.
5. The districts should review their policies and procedures in the context of reviews and development of goals and strategic plans, with a view to ensuring that they contribute to system efficiency and effectiveness.
6. The Ministry and the districts should review the implementation of special education integration policies with reference to their impact on the efficiency and effectiveness of the system.
7. The Ministry and districts should review the budgetary timetable with a view to stabilizing the process.
8. The districts and, where appropriate, the Ministry should review the administration of purchasing, operations and maintenance, with a view to maximizing decentralized decision-making authority. In conjunction with this, the Ministry and districts should cooperate in developing management information systems as may be required to implement effective decentralization of decision-making authority while maintaining centralized monitoring and control, and to satisfy monitoring and reporting requirements of the kind recommended by the Auditor General of B.C.
9. Districts which have not done so in recent years should give careful consideration to the merits of having an external body undertake a review of district operations.
10. The Ministry should consider the merits of requiring periodic comprehensive audits of the districts.
11. The Ministry and the districts should review policies and procedures regarding the orientation and training of school trustees and should take appropriate action to remedy any deficiencies.
12. The Ministry and the districts should ensure that the qualities of leadership required by superintendents and school administrators are a primary consideration in recruitment, training and professional development.

7. Other Issues

7.A Public Funding of Independent Schools

7.A.1 The Issue

Few issues investigated by the Commission have generated as much passion as the existence of independent schools, and specifically the use of public funds to provide operating grants to qualifying independent institutions. The question of the existence of independent schools pits the concept that educational quality can be improved if parents and children are given a greater opportunity for choice against the notion that independent schools lead to elitism, divisiveness and lack of tolerance in society. One submission put the latter case rather bluntly

"Those who, under the guise of freedom of choice, argue for an education system consisting of separate schools for Anglicans, Orangemen, and Marxists, Neo-Nazis, fundamentalists and rural romantics are only fostering sectarianism. Public education should be secular."

The issue becomes even more complex when it is realized that the case for more choice involves schools which cater to the dyslexic and the oral deaf, as well as schools which seek to provide religious basis for education and those which cater to students destined for university. A submission at a public hearing put the case as follows:

"Can we continue to support the notion of 'public education' as a single overarching structure which seeks to educate our children in some (it is fondly imagined) universally agreed way. I don't believe we can. I believe we must recognize the reality that our education system inevitably reflects our pluralistic, multicultural society whether we like it or not. Our elected representatives must seek to encourage the development of several distinct educational systems to meet the needs of our social mosaic..."

It is only with considerable effort that one could find an issue which contains a more volatile mix of ingredients than this one on the existence of independent schools.

When attention turns to the question of using public funds to help offset the operating costs of independent schools, the issue is more amenable to economic analysis. The question here is not whether or not independent schools should exist, but whether the province has any fiscal obligation to independent schools in a fashion parallel to the public system, and if so, how much? It is argued in many briefs that continued, or increased, funding directed to independent schools takes money away from the public system. This is seen as a serious problem during a period in which it is widely believed that the public system has not received an adequate level of funding. A submission from the British Columbia Principals' and Vice Principals' Association capture this point of view when they stated that, "private school education must not be funded at the expense of the public school system." The question of whether or not public support for independent schools in any way reduces the level of support available for the public system is the main topic of this section.

7.A.2 Background

The government of British Columbia has provided support to qualifying independent schools since 1977. Prior to this date, private and church associated schools were not given financial assistance, nor were they obligated to meet provincial government requirements. With the passage of the Independent Schools Support Act in 1977, however, the government was authorized to provide grants to those independent schools that chose to apply for assistance and met

the requirements of the Act. This legislation, now known as the School Support (Independent) Act, not only governs the financial basis of government funding for independent schools, but also provides for voluntary accreditation of non-funded independent schools.

To become eligible for provincial funding, an independent school must first incorporate as a non-profit society under the Society Act and, following incorporation, operate successfully for one year. The School Support (Independent) Act provides for two levels of financial assistance, depending on classification: Group 1 or Group 2 funding. Before granting Group 1 classification, the Independent Schools Branch of the Ministry of Education must be satisfied that the school's facilities are adequate and that no programs in the school promote racial or ethnic superiority, religious intolerance or persecution, or social change through violent action. In addition to meeting the criteria for Group 1 classification, Group 2 schools must meet the curriculum requirements for public schools, participate in specific pupil testing programs, agree to a regular external evaluation of the school, and verify that all teachers in the school are presently certified or will be certified within five years of the application.

Each year, schools apply for funding under the School Support (Independent) Act by filing the required data sheets by October 15. Actual payments are determined by multiplying the number of qualifying full-time equivalent (FTE) students by the appropriate percentage of the corresponding public school district's per-pupil operating cost. Thus, the provincial grant to an eligible school consists of: (qualified enrollment) X (the average per-pupil operating cost in the relevant district) X (Group 1 or 2 weighting factor). In 1987/88, Group 1 schools receive a grant equal to 10% of the per-pupil operating cost, and Group 2 schools receive 35%. Prior to this year, the weighting factors were 9% and 30% respectively.

To obtain the grant, each classified school must file an externally audited report by June 15, verifying the number of qualified full-time equivalent students in attendance. The grant is payable according to a schedule set by the Ministry of Education: 40% in January, another 40% in June (based on estimates), and a final payment of approximately 20% in November, reflecting the actual audited enrollment. A grant received by a Group 1 school may be used to pay any of the operating expenses of the school, except remuneration of teachers; Group 2 funding may be used to pay any of a school's operating expenses.

In addition to block grants from the province, independent schools benefit from other forms of both direct and indirect aid. Many schools qualify for exemption from municipal under section 398 of the Municipal Act, and similar provisions appear in the Taxation (Rural) Act and in the Vancouver Charter. A school which meets the requirements under one of these three Acts is also exempt from school taxes by virtue of the Education (Interim) Finance Act. The Ministry of Education, through the Publication Services Branch, provides free textbooks to independent schools that offer courses prescribed under the School Act regulations. As well, the services of the Provincial Education Media Center are available to Group 2 independent schools. The School Act permits public school boards to share facilities and services with independent schools or to lease any surplus or unused facilities, such as classrooms, to independent schools. And, according to the Act, a public school board may provide for and defray the cost of transporting students to and from independent schools, providing the school offers prescribed courses and the students reside in the school district.

7.A.3 Findings

Table 7.1 shows the total number of students enrolled in either the public or the independent school system since the school year 1977/78. Enrolment in independent schools as percentage of total school enrolment in British Columbia has increased from 3.2% in the school year 1977/78 to 6.5% in 1987/88. The percentage shift towards an increasing share for independent school has occurred because of an absolute drop in public school enrolment over this period, and an absolute increase in independent school enrolment. Between the school years 1977/78 and 1987/88, enrolment in the public school system declined from 510,642 full-time-equivalent (FTE) students to 471,134, a drop of 39,508 FTE students or 7.7%. By contrast, enrolment in independent schools increased from 16,817 FTEs to 27,887, an increase of 11,070 students, or 65.8%.

These aggregate statistics mask the very heterogeneous nature of independent schools both in terms of size and in terms of their philosophies and objectives. With respect to size, the Independent Schools Branch of the Ministry of Education has recognized, classified and assigned Group 1 and 2 status to a total of 206 independent schools. Only 20 schools, with 1,087 students or 54 students per school, are classified as Group 1. The remaining 31,767 students are accommodated in 186 independent schools—an average of 171 students per school. The total of 32,854 students recognized for funding purposes by the Ministry as attending schools other than those provided by the provincial public school system is less than the reported total of 35,400 estimated by Statistics Canada for the school year 1987/88 (Statistics Canada Cat. 81-220). This implies that there are an additional 2500 students attending schools which are not qualified to receive funding from the province. The Federation of Independent Schools Association (FISA) has estimated that 3,296 students fall into this category.

Independent schools also fall into several broad groups, according to their philosophies and objective. The largest single category of independent schools consists of the group of some 70 Catholic schools, with enrolments totaling 14,679, or about 45% of the provincially funded independent school population. The Society of Christian Schools, with 34 schools enrolling 5,337 students, is the second largest group, followed by the non-sectarian Independent Schools Association, which registers 4,693 qualifying students in a dozen or so schools. These three groups account for approximately 75% of the population; the remaining 25% attend various Christian schools, many of which operate in churches, and other non-aligned schools which offer a particular philosophy or serve a specific constituency.

Table 7.2 shows the level of direct grants from the province to the Group 1 and Group 2 independent schools. In the school year 1986/87, the provincial government approved and paid just over \$31.1 million in grants to independent schools, a 270% increase in funding since the first payment of \$8.4 million was made in 1977/78. Of the total amount, \$30.9 million went to Group 2 schools and the remainder to Group 1. In terms of per-pupil allocations, Table 7.2 shows that Group 1 schools received \$345 per pupil in the school year 1986/87, while Group 2 schools received \$1135.

The total provincial grant to independent schools may be put into perspective by recalling that it approximately equals the estimated \$30 million in Homeowner Grants which are not used for educational purposes. Thus, in terms of fiscal resources not available for public school purposes, the two issues are currently of equal importance. Further insights into the fiscal importance of the issue are gained by noting that the \$31 million allocated to independent schools in 1986/87 represents 1.8% of the total revenue available for public school purposes from general provincial revenue, residential and non-residential taxation and Homeowner Grants.

Thus, in terms of the current and historical levels of public support for independent schools, the issue is not too important. However, this conclusion may not hold in the future depending upon the level of support made available to independent schools, how the support level translates into fee or quality levels, how students and their parents react in terms of the number of additional students who leave the public system, and the implications of the student migration in terms of per-pupil operating costs. It is tempting to use the enrolment data presented in Table 7.1 to estimate the responsiveness of students to the presumed fee reductions made possible by provincial grants. No doubt, the significant increase in independent school enrolment was influenced to some degree by the level of public support first made available in 1977, but an exact estimate of student responsiveness can only be obtained with a good deal of detailed economic modelling. For example, data from other provinces on the absolute number and percentage share of students enrolled in independent schools suggest that the trend toward increased enrolment in independent schools reflects a national trend, probably related to a whole host of sociological and economic variables other than just public fiscal support. At the national level, enrolment in independent schools increased each year in absolute terms between 1977/78 and 1986/87, then declined slightly in 1987/88. However, rapidly changing provincial definitions of exactly which schools are classified as independent makes observations of this sort extremely hazardous, and serves to illustrate the point that a detailed study of the issue is required if exact estimates of future enrolment trends, and their associated cost implications, are to be obtained.

Table 7.1 Public and Independent School Enrolment 1977/78 to 1987/88

School Year	Public School Enrolment (FTE)	Independent School Enrolment (FTE)	Independent School Enrolment as Percentage of Total
1977/78	510,642	16,817	3.2
1978/79	500,198	17,820	3.4
1979/80	494,522	18,251	3.6
1980/81	492,053	19,645	3.8
1981/82	485,560	21,857	4.3
1982/83	482,255	22,475	4.5
1983/84	478,543	24,280	4.8
1984/85	472,264	25,833	5.2
1985/86	467,767	26,855	5.4
1986/87	467,053	27,877	5.6
1987/88	471,134	32,854	6.5

Source: B.C. Ministry of Education, Annual Report

Table 7.2 Independent School Grants 1977/76 to 1986/87

School Year	Group 1	Group 1 Per Pupil	Group 2	Group 2 Per Pupil	Total Grant
1977/78	NA	—	NA	—	\$8,402,275
1978/79	\$57,954	\$127.79	\$9,417,741	\$542.28	9,475,695
1979/80	130,503	179.51	10,532,897	601.06	10,663,400
1980/81	93,806	199.80	12,928,500	674.20	13,022,306
1981/82	146,435	237.29	16,785,807	790.27	16,932,242
1982/83	204,281	289.94	20,751,666	953.17	20,955,947
1983/84	260,223	301.17	22,796,202	973.51	23,056,425
1984/85	322,679	300.65	24,433,376	986.81	24,756,055
1985/86	247,561	303.90	26,225,405	1007.10	26,472,966
1986/87	232,236	344.74	30,876,129	1134.97	31,108,365

Source: Province of B.C. Ministry of Education Annual Report 1986/87.

7.A.4 Conclusions

The principle of provincial funding for independent schools is not new, nor unique to British Columbia; four other provinces in Canada—Alberta, Saskatchewan, Manitoba, and Quebec—provide aid to independent schools. The governments that have been the most generous to independent schools are Quebec and Alberta, which provide 80% and 75% of what corresponding public schools receive, subject to certain qualifications. In addition to this funding for non-denominational independent schools, some provinces, including Ontario, Alberta, and Saskatchewan, make formal provision in law for the public funding of Roman Catholic schools. Denominational schools in British Columbia receive no recognition or tax support as such; however, they have been able to qualify for public funding since 1977 under the School Support (Independent) Act.

Independent schools have been established for a variety of motives, including religious, cultural and academic concerns. Although Canadians seem to support the principle of equality of condition and, therefore, the universality and accessibility of a public education system, there is a general acknowledgment that a democratic system of government

should also reflect the variety and diversity of society and allow freedom of choice. Opponents to public funding for independent schools object to what they see as the elitist nature of some of these institutions; by being selective and, therefore, discriminatory in their admission policies, independent schools can reject students who are more difficult to educate, leaving them for the public system which must accept everyone. Some critics go so far as to suggest that the existence of an independent school system of significant size has a divisive, negative effect on the social fabric of the province. Government funding of independent schools is seen to make an already bad situation worse. Proponents of independent schools suggest that the resulting competition both forces the public system to be more responsive to parental concerns, and provides enhanced educational choice for those not happy with some facet of the public system. Many contend that it is the independent schools' challenge to the public school monopoly which provides the most compelling economic argument for public support of independent schools.

When the complex and emotional issue is reduced down to the purely fiscal dimension of whether or not the provision of public funds to support education in independent schools diverts funds from public schools, the issue is more amenable to economic reasoning. West (1985) presents some simple calculations for Ontario which show that provincial funding of independent schools equal to 30% of present public school costs would actually reduce the overall burden on Ontario taxpayers if more than 1.75% of the public school population migrate to independent schools as a result of the subsidy. The presumption is that taxpayers, considered as a whole, would approve of the reduction in school taxes, and thus there would be no adverse effects on public school funding because of the move. While many of the assumptions and longer-run consequences of this type of calculation may be questioned, the analysis underscores the point that a robust answer to the question requires a detailed modelling effort, and knowledge of some important behavioral and cost parameters.

Thus, the future effects on the public system of increased or decreased support to independent schools cannot be answered without considerably more work, but there are some important immediate conclusions which should be emphasized. First, in terms of the current level of public support provided to independent schools in British Columbia, the issue is relatively unimportant. Only \$31 million in 1986/87 was allocated to independent schools. This represents 1.8% of the total revenue available for public school purposes from general provincial revenue, residential and non-residential taxation and Homeowner Grants. It is approximately equal to the portion of individual Homeowner Grants which are not used for educational purposes, but instead spill over to help offset municipal tax liabilities. There is no evidence to support the hypothesis that public support for independent schools at the current levels reduces the level of funding for public schools. Second, much of the opposition to continued or increased funding for independent schools has implicitly focussed on "academic" schools which cater to a clientele desiring university entrance. This has diverted attention from the denominational and special needs independent schools for which the issue of public funding is more historical, political, and cultural. Finally, with the acceptance of public money comes the twin issues of attendant obligations and accountability which may be difficult to reconcile with the nature of independent schools. The Commission has not been able to investigate these issues in any detail.

7.A.5 Suggestions

1. *Since the research group could find no evidence that the current level of support for independent schools has reduced the level of funding available to public schools, it is suggested that the existing level of support be maintained.*
2. *Whether this level of support should be enhanced, and/or better targeted to only certain types of independent schools based on fee levels or educational philosophies, are important issues requiring detailed analysis. It is suggested that the required analysis on these fiscal issues, plus an analysis of the accountability question for independent schools, be completed before any proposed increase in public funding is enacted.*

7.B Capital Grants

7.B.1 Background

Most of the discussion in this paper has been concerned with spending and taxation for operating purposes. However, capital funding for school facilities and equipment is an important part of public school financing. In 1988/89, more than \$170 million will be spent on payments to service long-term debt incurred to finance capital expenditures.

Capital expenditures are incurred for a variety of purposes. For example:

- Capital maintenance and upgrading—such as roof replacement and safety related modifications to facilities.
- Transportation equipment—primarily the purchase of school buses.
- Renovation and replacement—largely in response to aging facilities.
- New space—additions to existing buildings or new facilities to meet enrolment growth.

By law, school boards cannot undertake capital expenditure without the prior approval of the Ministry of Education. Boards are required to submit capital spending requests to the government for review and authorization. Not all requests are approved and not all are eligible for joint-funding with the government.

Approved, eligible projects are financed through long-term debt and the government assists school boards to pay the debt-servicing costs. On average the government pays 84% of costs. School boards pay the remaining 16% through their levy on residential property. The provincial government finances its contribution through general revenue and part of the proceeds of the province-wide levy on non-residential property. The proportion of debt servicing costs covered by provincial grants varies from district to district depending on each district's ability to pay. The sharing-ratio ranges from 58% in West Vancouver to 97% in Fort Nelson.

7.B.2 Findings

Many of the concerns expressed to the Commission about capital funding paralleled similar issues on the operating sides:

A) Adequacy and stability of funding

Over the last ten years capital spending approvals have been extremely volatile—ranging from a high of \$220 million in 1981/82 and a low of \$20 million in 1983/84 (see Table 7.3). Although capital spending is by its nature more uneven than operating, the pattern of capital approvals has been dictated by the provincial government's fiscal policies not by changes in the requests for funding. When provincial revenues were strong approvals were large. During restraint approvals were cut back to a bare minimum.

In some ways school boards were able to respond more easily to reductions in capital spending than restrictions on operating spending. Capital projects were simply postponed. But many of the briefs to the Commission drew attention to the impact of this neglect on the quality of the school environment and the eventual cost of repairs.

Some briefs anticipated the probable need for large capital expenditures over the next decade as many of the schools in the province reach "middle age". Approximately 60% of the schools in the province were built in the 20 years after the last war, in response to the baby-boom. Many were built quickly, using wood frame construction techniques, and are now showing the effects of natural wear and tear. There is considerable concern

that this less visible problem of school funding will become a major concern if additional funds are not allocated to facilities.

At the same time that facilities are wearing down, the children of the baby-boom generation are working their way through the school system and overall enrolment is expected to increase over the next decade.

The government has announced approved funding in excess of \$130 million for 1988/89. This represents a substantial increase over recent years but is still well below average funding for the late 1970s and early 1980s. When inflation is taken into account spending approvals in 1988/89 are 40% below the level they were ten years ago. The B.C. School District Secretary-Treasurer's Association summed up the situation as follows:

"The province will face a facility crisis in the near future if attention is not paid to a basic component of the public education system—the school".

The government has taken steps to improve the predictability of capital funding for projects that extend the life of facilities such as roof replacement and electrical upgrading. A capital allowance has been included in the fiscal framework for each district based on the age and replacement cost of the facilities in the district. This Capital Allowance will total \$23.5 million in 1988/89.

Table 7.3 Approved capital budgets

Fiscal Year	Approved Budgets (\$ million)
1978/79	94
1979/80	99
1980/81	126
1981/82	220
1982/83	146
1983/84	20
1984/85	53
1985/86	54
1986/87	76
1987/88	100
1988/89 (est.)	132

B) The Sharing-Ratio

The formula used for determining the sharing ratio for capital funding was not changed in 1982 when the government took control over the non-residential tax and amended the method of setting the sharing ratio for operating purposes. Therefore, the sharing formula for capital continues to recognize non-residential taxation as a local source of revenue and uses a completely different approach for establishing the provincial share than the operating formula. Very little attention has been given to this issue.

7.B.3 Conclusions

We can see little justification for the uneven and unpredictable pattern of capital approvals over the past ten years. We can understand the government's concern to curb spending during restraint but it was probably a false economy. Unlike some areas of public spending capital expenditures in education do not lead to higher operating costs. The children have to go to school regardless of the quality of facility provided. Indeed, project costs may have increased if postponed renovations have developed into more serious structural problems. Therefore, stability of funding is appropriate objective for capital funding as well as operating.

While a stable core of funding is necessary, the government must also recognize that capital costs will probably continue to grow over the next ten years in response to emerging enrolment patterns and the natural aging of the capital stock. Resources will have to be found to meet these needs.

We have already suggested that the government redesign the sharing-ratio for operating grants. In principle, we see little reason for the formula for capital to be substantially different from that for operating purposes. Moreover, to reduce the complexity of the overall funding system we see great merit in amending the sharing formula for capital to bring it closer to that used for operating purposes. We recognize, however, that the process of transition may have to allow for the application of a revised formula only to a new capital approvals.

7.B.4 Suggestions

1. *Capital spending approvals should be restored to a level adequate to fund the ongoing maintenance, upgrading and replacement of facilities and major equipment.*
2. *To ensure greater stability and predictability in funding the government should move to a system of multi-year capital approvals.*
3. *The government and school boards should develop a special program to respond to the deteriorating condition of the large number of schools built in the immediate post-war period.*
4. *The formula for sharing capital costs should be amended to bring it closer to the formula used for setting operating grants. The government should develop proposals for change and present them to school boards for discussion.*

7.C Demographic Trends

In September 1987, the British Columbia School System enrolled 471,134 full-time equivalent (FTE) students, consisting of 4.1% (19,422) kindergarten students, 55.3% (260,000) students in grades 1-7 and 40.6% (191,190) students in grades 8-12. The enrolment of 471,134 FTE students for the school year 1987/88 reversed a pattern of declining enrolment which had been a characteristic of the system for the last decade. For example, in the school year 1977/78, the school system enrolled 510,642 FTE students. This number fell continuously over the subsequent school years until the enrolment of 467,053 FTE students was reached in 1986/87. In total, this represented a loss of 43,589 FTE students, or 8.5% of the 1977/78 base year figure. The new era of increased enrolment, begun with the 1987/88 enrolment figure, is expected to continue to the year 2011 as the so-called "baby echo" moves first into the 5-12 year old age cohort. The population in the 13-17 year old group is expected to continue to decline until 1991, and then to increase in a pattern similar to the 5-12 year age group. In total, it is estimated that by 1997 there will be an additional 64,679 students in the system, thus more than offsetting the decline of the last decade.

In terms of the spatial pattern of the anticipated enrolment increase, it is expected that the Lower Mainland school districts will experience the larger share of the growth. For example, of the additional 64,679 students expected to be in the school system of 1997, approximately 56% (36,000) will be located in the 5 Lower Mainland school districts of Abbotsford, Langley, Surrey, Richmond, and Maple Ridge. Populations projections produced for the Commission by the Central Statistics Bureau, Ministry of Economic Development show that the disproportionate growth of the Lower Mainland school districts will continue well past 1997. Their figures show that over the 20 year period, 1987 to 2006, it is expected that the population in the 5-17 year old cohort for the 5 Lower Mainland school districts will have increased by nearly 50%, in contrast to the roughly 23% overall provincial increase for the same age group over the same 20 year period.

Finally, the school district population projections from the Central Statistics Bureau may be used to identify specific school districts which are expected to either grow very rapidly, or decline significantly over the 20 year period 1987-

2006. School districts which are expected to experience a 30% or more increase in school age population over this period are:

- South Okanagan (14)
- Central Okanagan (23)
- Abbotsford (34)
- Langley (35)
- Surrey (36)
- Vancouver (39)
- New Westminster (40)
- Maple Ridge (42)
- Coquitlam (43)
- Sechelt (46)
- Howe Sound (48)
- Smithers (54)

The School districts which are projected to lose more than 15% of their school age population (5-17 years) over the period 1987-2006 are:

- Kimberley (3)
- Keremeos (16)
- Princeton (17)
- Golden (18)
- Revelstoke (19)
- Armstrong-Spallumcheen (21)
- Lillooet (29)
- Hope (32)
- Powell River (47)
- Central Coast (49)
- Lake Cowichan (66)
- Alberni (70)
- Vancouver Island West (84)

These data on school age population projections make the same point as noted above—with the exception of a few school districts mainly in the Okanagan Valley, the majority of the school age population increases are focussed on school districts in the Lower Mainland.

8. Conclusions

8.A Revenue

1. The philosophy of taxing property to provide public education is based on three, often competing, concepts—equal treatment of equals, taxation in proportion to benefits received, and relation to taxpayer's ability-to-pay. To these three tax principles must be added the fourth concept of local control and responsibility for the provision of public education. The Commission considers it fundamental that some degree of local taxation to support primary and secondary education be maintained in order to ensure a credible tie between local preferences and the political/economic decision making process which determines taxing and spending levels for education. It is with the insights and constraints of these four principles that the research group suggests that the use of property taxation for school purposes be continued.
2. Further, we conclude that the province should continue to set and collect the non-residential tax so long as all tax proceeds are re-distributed back to school districts through the fiscal framework. The resulting level and distribution of the proceeds from the taxation of non-residential property is both more efficient and equitable for all citizens of the province.
3. There is no "correct" level of locally raised revenue for school purposes. The level must be high enough to guarantee effective local control of and responsibility for public education, but not so high that very unequal amounts of per-pupil cross district expenditure and net tax levels result. It is suggested that the Ministry of Education and all other state holders in the educational system constantly monitor these variables, but that no rule or target be implemented.
4. Finally, we conclude that no drastic changes in the principles and procedures underlying the Homeowner Grant are required at this time. The size of the grant and the timing of any increases need not be indexed to any other variable in the economy. However, it is recommended that a minimum school tax be implemented to return the portion of individual Homeowner Grants not used for educational purposes back to the local school boards.

8.B Expenditure

1. During the past six years the debate over school finance has been a source of considerable friction between the government and the education community. The impact of the restraint program, and the uncertainties caused by major changes to the school finance system, combined to produce a period of confrontation between the provincial government, school boards and teachers. As a result, considerable energy and attention has been diverted from the business of education to the "battle" over school finance. The ultimate losers in this process have been the children in the classroom.

In the last couple of years some of this tension over funding has eased as additional funds have been found for education and other issues, such as the structure of collective bargaining, have received more attention. However, the people in the education community remain somewhat "gun-shy"—not knowing what changes the government may introduce next. We believe, therefore, that the most important objective in education finance is to return to a period of relative calm and stability in funding. The debate over education finance should take a back seat to the more fundamental issues addressed by this Commission.

2. While seeking to diffuse the situation, we recognize that no system of school finance will be free from controversy—especially where one level of government has responsibility for spending funds raised by another level of government. Some tension will always exist between those who see the need for new programs and additional spending and those who have to pay for that spending. For example, school boards and the provincial government will always have a somewhat different perspective on the cause of residential property tax increases. School boards will point to under-funding by the government while the province will point to excessive spending by school boards. This tension is an inherent feature of education finance but we believe it can be kept to a minimum by incorporating features in the financing system that emphasizes a reasonable and predictable level to provincial funding.
3. Nor do we believe that the education sector can or should be totally insulated from the ups and downs of the provincial economy. Along with most sectors of the B.C. economy in the late 1970s and early 1980s. But that success could not be sustained in the face of the worst recession since the 1930s. Education had to respond to the new fiscal realities. However, the manner in which restraint was applied, and the feeling on the part of the education community that schooling was being singled out for severe cutbacks, only served to aggravate a difficult situation. What should have been a joint effort to address an unavoidable fiscal problem became a period of controversy and confrontation. We believe that all the participants in the delivery of education will accept the realities of good times and bad, provided sudden and arbitrary changes in funding can be avoided.
4. We therefore suggest that the provincial government establish a block-funding arrangement with school boards similar to that employed in federal-provincial transfer payments. Such an approach would introduce improved predictability and stability to the funding of schools. The formula would ensure that education funding is automatically linked to the growth of the economy. Education would share in the good times and bad, but the formula would smooth out the ups and downs of the economy. The government should discuss the design of this formula with the major stakeholders. The formula, once established, should remain in place for a period of five years.
5. We believe that most of the structural changes to the financing system introduced since 1982 represent substantial long-term improvements and should be retained. We suggest moving to a system that incorporates the strengths of the present system within a block-funding arrangement. The government should retain jurisdiction over the non-residential tax. School boards should have access to the residential tax base only. The provincial government should continue to alleviate the impact of the residential tax through the homeowner grant. The fiscal framework should continue to be used as part of the funding formula. It is an excellent way of determining how the cost of the core program varies from district to district. However, the fiscal framework should be used to set the relative funding level between districts not the absolute amount.
6. One of the potential sources of conflict in the financing system is the explicit references to teachers' salaries in the fiscal framework. So long as collective bargaining takes place at the local level this reference will be seen as an unnecessary intrusion into collective bargaining. The government has every right to establish a reasonable level of funding for education and expect school boards to manage with the resources provided plus local taxation. We believe the block-funding arrangement proposed can deliver security of adequate funding without the necessity of "flagging" appropriate salary increases. With such a system, school boards and their employees would recognize that they have to live with the consequences of contract settlements. Property tax increases resulting from large settlements would more clearly be the result of local spending decisions, not provincial funding policy.
7. We therefore suggest that the government remove all references to salaries from the funding formula. The financing system cannot and should not be used as a lever to counteract bargaining outcomes. If the results of collective bargaining are consistently unacceptable, the collective bargaining procedures should be changed, not funding withheld. It is possible that the combination of predominant provincial funding and local collective bargaining may prove to be incompatible; in which case the provincial government will have to look seriously at some form of centralized bargaining.

8. We have identified some important weaknesses in the mechanics of the funding formula that should be addressed by the government. However, we have kept our recommendations for change to a minimum. It is better to retain a somewhat flawed system rather than aim for perfection. Too much change would only work against the strong desire for greater stability in funding. However, we are concerned to minimize poor incentives in the funding system and to ensure an equitable tax burden between different school districts. It is critically important that all changes be thoroughly discussed by representatives of school boards before they are introduced. The Fiscal Framework Review Committee should continue to study and recommend structural changes to the fiscal framework. Particular attention should be given to simplification of the formula and restructuring of function 5. The mandate of the committee should be expanded to include periodic review of the sharing ratio established by the government.
9. In establishing the sharing ratio for school districts the provincial government should continue to recognize local revenue-raising capacity. The principle of equalization should be retained. However, the government should re-design the sharing ratio to ensure that districts with similar capacity to raise revenue levy similar tax rates to support the "core" program. Districts with higher recognized per pupil costs should not be expected to levy higher tax rates. Further, the government should derive a new index of revenue-raising capacity that will generate more evenness in taxes paid by the average homeowner in each district.
10. In our review of education finance we have found that too much attention has been diverted to how much is spent on education and not enough on how well the money is being spent. This brings us to the issue of accountability.

8.C Accountability

1. School Districts in British Columbia are accountable in a procedural sense. All Districts have financial accounting systems, controls, and practices in place, and duly prepare and submit annually to the Ministry audited financial statements. Although there is no formal compliance reporting by or compliance auditing of School Districts, management systems are in place in the 15 Districts surveyed to ensure due regard to compliance with such statutory and regulatory authorities as are prescribed. So the public in British Columbia can rest assured that the funds allocated to School Districts are handled with probity, and that Districts generally play by the rules. But what does the public get for its money? In this consequential or value-for-money sense the accountability story is, alas, very different.
2. School Districts in British Columbia like to couch the value-for-money question in terms of "underfunding", that is, in terms of the "need" for more funds in the system. A rational answer to the question of whether enough is spent depends on persuasive evidence that what is spent is well spent. No such evidence is presently reported to the public which therefore simply does not know what it gets for the resources devoted to education. There is presently no accountability in a value-for-money sense, there ought to be, and there can be.
3. The survey of 15 Districts revealed serious deficiencies—which should be remedied as a pre-condition of the maintenance of, far less increases in, public funding—with respect to objectives, information on outcomes in the areas of efficiency, effectiveness, and cost-effectiveness, and management systems, controls, and practices designed to show due regard for economy, efficiency, and effectiveness.
4. Consensus on the mandate and goals of the public education system in British Columbia does not exist. In the absence of such clear direction it would be very difficult to implement a workable system of accountability in a value-for-money sense. The development of a fully integrated, operational set of goals and objectives, from the Ministry down to the individual school, is a necessary first step in the development of appropriate accountability. Within such a framework, educational goals and objectives must be clearly distinguished from other goals and objectives.

5. All Districts submit audited financial statements based on the fiscal framework, but we discovered that this information bore little relation to actual functional, program, and activity costs in Districts. Some Districts may collect cost information for management purposes, but that information is idiosyncratic, and, in any event, is not reported to the Ministry or the public. In short, there is at present no accountability for comparative efficiency, and a set of cost allocation procedures, a set of pragmatic cost standards, and annual reporting by Districts to the Ministry and the public, using these consistent procedures and standards, are necessary as a first step to resolving this part of the accountability equation dealing with "doing the thing right". But what about the larger question of "doing the right thing"—the thorny issue of effectiveness?
6. A few province-wide indicators of educational outcomes are presently reported to the Ministry and the public, and the Ministry's program evaluation initiative in this area is to be commended. But what is missing is a set of defensible measures of educational effectiveness at the District level which distinguish the "value-added" by Districts—that is, take into account the initial level of preparedness of students in each District—and reflect the degree of achievement of provincial goals and objectives expressed in a set of performance targets. Such a set of measures should be developed jointly by the Ministry and the Districts, and should then be reported annually to the Ministry and the public by all Districts on a consistent basis. At present the public has virtually no useful information on what has been achieved by spending scarce public resources in School Districts. Such information should and can be provided in a way which permits external validation of performance by Districts.
7. There is considerable resistance in Districts to linking resources spent to outcomes achieved in the educational system in British Columbia. This is a difficult question, but it cannot be ignored. Value-for-money is, in the final analysis, about cost-effectiveness, and development of such information is critical to determining how much money should be spent. The Ministry should pursue its initiative in the 1987 Annual Report linking effectiveness measures to resource utilization measures, and should publish annually information linking standardized operating cost per student ("equal equivalent cost") with a set of effectiveness measures for all Districts.
8. Management structures, systems, controls, and practices appear to be well designed to serve procedural accountability, and, to some extent, the value-for-money question of economy in purchasing, but—despite the general satisfaction with management systems expressed in the course of the District survey—do not serve well the broader value-for-money issues of efficiency, effectiveness, and cost-effectiveness. The absence of planning mechanisms and approaches to collecting, far less reporting, data on costs and educational outcomes is particularly apparent, and the Ministry should work consultatively with Districts to ensure that improved management systems are designed and implemented in all Districts, with particular attention to reporting to the Ministry and the public.
9. From the point of view of public funders, improved accountability by Districts is critically necessary, and should be a pre-condition of continued public funding. It can also be argued from the Districts' point of view that their success in attracting adequate and stable funding in a climate of fierce competition for scarce public resources will be increased by persuasive representation of value for money provided. It remains true that accountability is not an end in itself, and must be approached in a pragmatic, developmental way consistent with practical feasibility and cost. There is clearly no point in requiring Districts to spend so much time being accountable that they have no time to do anything to be accountable about! There is also considerable obligation on the part of those who receive accountability information to use it, and to use it in a way which provides suitable incentives to those held accountable. It would, for instance, be perverse to establish and act on the basis of performance measures which failed to capture the primary objectives of the activity measured, and drove teachers to teach to the performance test and not to the intended but unmeasured larger task. It would be equally inappropriate to require information on value for money and then to continue to fund in a manner unrelated to demonstrated performance. So the task is not an easy one. But a start has been made under Ministry leadership and much more can and should be done. The first steps we have proposed are, we believe, both feasible and necessary.

References

- Atherton, Peter J. "Critical Issues in Education Finance in Ontario" in *Background Papers: The Commission on the Financing of Elementary & Secondary Education in Ontario*. Ontario, 1985.
- Auld, D.A.L. "Financing Primary and Secondary Education: Objectives and Means" in *Background Papers: The Commission on the Financing of Elementary & Secondary Education in Ontario*. Ontario, 1985.
- British Columbia Teachers' Federation. *Education Financing in British Columbia*. Vancouver: B.C.T.F. Bargaining Division, 1987.
- British Columbia Teachers' Federation. *Statistics Handbook (various years)*.; Vancouver: B.C.T.F. Bargaining Division.
- British Columbia Teachers' Federation. *1988 Budget Recovery Kit*. Vancouver: B.C.T.F. Bargaining Division, January 1988.
- Canadian Tax Foundation. *Provincial and Municipal Finances 1987*. Toronto: Canadian Tax Foundation, 1988.
- Canadian Teacher's Federation. "Economic Service Bulletin". Ottawa: C.T.F., June 1985.
- Fleming, J. R. *School Taxation Report*. Victoria: Ministry of Education, 1981.
- Fleming, J.R. and B. Anderson. *Financial Management of Education in British Columbia*. Victoria Ministry of Education, March 1984.
- Kitchen, Harry, M. *Local Government Finance in Canada*. Toronto: Canadian Tax Foundation: 1985.
- Province of British Columbia. *Budget 1985*. Victoria: 1985.
- Province of British Columbia. *Ministry of Education Annual Report*. Victoria: 1987.
- Statistics Canada. *Advance Statistics of Education*. Ottawa: Catalogue No. 81-220.
- West, E.G. "Public Aid to Ontario's Independent Schools". *Canadian Public Policy*. December 1985, pp.701-710.

Appendix 1. Information from the Fiscal Framework obtained from the District Survey

1.A Issues

The perceptions associated with the specific parts of the fiscal framework were as diverse as the school districts visited. The types of issues raised by respondents can be placed under three main question categories:

Do cost factors and service levels used in the fiscal framework reflect school district needs in providing a basic level of education?

Does the fiscal framework treat each school district fairly when it derives the amount of financial resources believed by the Province to be necessary to provide a basic level of education?

School district perceptions associated with these two categories will be examined in the following sections.

1.B Findings

1.B.1 Fiscal Framework Cost Factors and Service Levels

The Ministry of Education uses a combination of cost factors and service levels to determine the amount of financial resources a school district requires to fulfill its mandate of providing an appropriate level of education. Cost factors are determined by the Ministry reflecting prescribed standards in some cases and actual expenditure in others, while the fundamental component in determining service levels is Full Time Equivalent (F.T.E.) enrolment. As most districts expended more money for what they considered an appropriate level of education than the Ministry believed was necessary, there was general agreement on the part of respondents that existing cost factors and service levels did not reflect district requirements.

Examples of cost factors which respondents felt were inadequate included administrative allowances and senior school district personnel salaries. The major criticism, however, was directed at the one year difference in district average teacher salaries recognized by the Ministry and the actual costs incurred by the district. Respondents felt that this difference in average teacher salary caused by using outdated information could have been adjusted at the end of September each year just as projected F.T.E.s were reconciled.

Respondents also felt that service levels used in the fiscal framework imposed Ministry bias. The major complaint of respondents was the lack of provincial service levels for programs that respondents felt were part of a basic level of education. One B.C.T.F. respondent noted that there were "too many empty boxes". The three most cited examples of no provincial service level were programs 1.08, Elementary Counselling, 6.07, District Resource Centre, and 7.72, Extra-curricular Transportation. Compelling arguments were presented for the Ministry to acknowledge that these three programs were part of a basic education. For example, the argument for inclusion of elementary counselling was related to the Ministry's goals of social and human development.

The other significant respondent theme with respect to service levels related to the Ministry's assumption of economies of scale. The primary example cited to demonstrate the economies of scale view on the part of the Ministry was the 3.5% "capping" of district F.T.E. enrolment for special education programs—3.26, Severe Learning Disabled, 3.27,

Educable Mentally Handicapped, 3.28, Severe Behaviour, 3.29, Rehabilitation—and the 2% “capping” of district total F.T.E. enrolment for program 3.32, Gifted. Similarly, the Ministry believed that school districts with F.T.E. enrolments of less than 1,000 did not require the services of a full-time superintendent and secretary treasurer.

Another issue that arose during the investigation was the need for the Ministry to get away from cost factors which were derived from actual school district expenditures as distinct from some sort of cost standard. The examples cited included all of Function 5, Operations and Maintenance, and fuel costs in Function 7. Some respondents felt that the Ministry encouraged inefficiencies by recognizing actual expenditures. By acknowledging actual expenditures, the Ministry ensured that there were no financial incentives to convert buses to propane. Similarly, not setting cleaning or maintenance standards based on comparable industry criteria ensured that the status quo was maintained.

1.B.2 Fairness of the Fiscal Framework

The single most dramatic theme that arose from this investigation was the different perceptions of respondents from districts within the lower mainland and lower Vancouver Island area compared to those from districts outside this area. Those districts that called themselves “beyond Hope” had a different perception of the shortcomings of the fiscal framework than did those districts in the two major urban centres of B.C. Districts in the lower Island and mainland areas felt the fiscal framework and the subsequent base grant did not provide enough resources for an appropriate level of education. The “beyond Hope” districts felt that there were insufficient financial resources to provide a similar level of education to that currently found in the lower Island and mainland areas.

Respondents from outlying areas cited geography, rural make-up and physical distance from the two major urban centres of B.C. as the most critical issue needing specific attention in the fiscal framework. One superintendent of a remote school district noted that the ability of teachers to fly in small planes was as much a requirement as a teaching certificate. Another superintendent of an isolated district noted that it was not uncommon for him to spend over eight hours behind the wheel of a car to attend to his duties. While this geographic obstacle may be overcome by motivated educators, the problem was not as easily resolved for the children in these communities. Because of a perceived lack of financial resources for student travel and insufficient recognition of dispersed schools in the fiscal framework, children in these communities remained in isolation with limited accessibility to the cultural, economic, political, and social amenities afforded students in the two major urban centres.

Besides the geographic isolation felt by many respondents in the hinterland, there was a feeling of dissatisfaction with the use of F.T.E. enrolment as the primary basis upon which fiscal framework assessments were derived. While F.T.E. enrolment was seen to be appropriate in urban areas, it made little or no sense in rural districts with dispersed communities. For example, the fiscal framework allocation of kindergarten teachers is predicated on one teacher for every 22 F.T.E. students. Because kindergarten operates on a half-time basis, 22 F.T.E. pupils translates into 44 real pupils. Many rural communities had difficulty identifying 44 students in four or five grade levels let alone in kindergarten.

Another problem of F.T.E.-derived cost factors in the fiscal framework reported by rural school districts was the assumption that operating budget economies could be attained by consolidation. While two or three schools with excess capacity could have been closed and a new more efficient school opened, the catchment areas to attain this were argued to be too large. More importantly, while consolidation might provide savings in the operating budget, these might be more than offset by the new capital budget outlays.

Finally, respondents in rural economically depressed school districts reported that the school board was one of area's largest employers. An enrolment-based fiscal framework has not recognized the economic and social consequences of this externality. In many isolated areas, the school is the centre of all community activity. One Chairman of a Board noted that the fastest way to kill a small community was to shut the local school. While no respondent wanted the public school system to be the provincial government's primary economic development instrument, the economic impact of the provincial transfer of funds was stressed.

The paramount issue that was applicable to all districts surveyed dealt with the consequences of Function 3, the funding for special education. Surprisingly, the issue was not the adequacy of funds for special education other than those

previously discussed, but rather, the educational consequences of high levels of integration into the regular classroom. There has been a determined effort on the part of parents, special education teachers and educators to integrate disadvantaged children into the regular classroom and to stream gifted children out of the regular classroom. The results of this movement have ensured that those children at both extremes of the intellectual and psycho-motor development scales have been given positive classroom demographics to the detriment of the average student on which the entire system is based.

Another special education integration issue noted by respondents was programs 3.30, English as a Second Language (E.S.L.) and 3.31, Native Indian Education. Those districts with a high proportion of E.S.L. students felt that their needs were insufficiently recognized in the fiscal framework. However, in many cases most E.S.L. students were integrated in the regular classroom and subsequent tracking of E.S.L. program funds was unclear. In fact, in communities where there was a high concentration of a particular E.S.L. group, such as the Chinese community in Vancouver, these students were found to be some of the highest achievers in the public system. One superintendent in a district located in the interior of B.C. noted the same trend with respect to an East Indian group in his community. In contrast with pockets of ethnic groups excelling in the public system, no respondent claimed that native children as a group were higher achievers. In communities with high native populations, active children were fully integrated, and Indian education was not considered part of the special education field.

Most respondents could not understand Ministry logic for determining allocations for Function 6, Auxiliary Services, and Locally Developed Programs. Respondents noted that there was no relationship between how the dollar figure was determined and actual district requirements.

An issue that caused a certain amount of alarm to many respondents was the recent announcement by the Minister of Education of blending average provincial teacher salaries with district averages. Most respondents interviewed after this announcement was made noted that differences in district averages had more to do with the distribution of teachers on the pay grids than with major differences between district pay rates. Teacher salaries being the major cost factor faced by all districts, there was concern expressed that this recent change will only accentuate the differences between various districts and will place districts with experienced teachers at a distinct disadvantage.

Finally, a consistent finding that was applicable across all districts and all respondent categories was the general lack of understanding on the part of most respondents of:

- how the base grant operates in relation to the fiscal framework;
- the role of the Home Owner Grant (H.O.G.) in funding the public education system;
- the rationale for the districts' lack of access to the non-residential tax base;
- the criteria used by the government in making its decisions on sharable capital costs.

Many respondents believed that the Province had shifted the onus of funding education onto the residential property owner, and that school districts were responsible for too large a share of the financial obligations of the public education system.

1.C Conclusions

To end confusion about district obligations to adhere to fiscal framework allocations, a clear policy statement from the Ministry of Education is required.

The frequent changes in fiscal framework formulas tend to prevent effective long-term financial planning.

As most districts do not accurately report expenditure on a program by program or function by function basis, only the total expenditure reported by a district is a reliable figure for comparison or planning purposes. Those programs based

on actual expenditure in Function 5, Operations and Maintenance, exacerbate this problem as there is a financial incentive for school districts to engage in 'creative bookkeeping'.

It appears contradictory for the Ministry to recognize certain programs in the fiscal framework and then not set a service level. All but one district visited had a resource centre. Similarly most districts engage in elementary counselling and extra-curricular transportation for their students. More generally, the Ministry has stated goals of vocational, social and human development but has not provided corresponding funds in the fiscal framework.

Teacher and administrative salary cost factors are based on outdated information, and could be replaced with more current information.

Function 5 allotments and fuel costs recognized in Function 7 are based on expenditures rather than on assessments of what resources are necessary to accomplish the task. Because the fiscal framework does not use comparable institutional cleaning and maintenance standards and current market rates for fuel to derive a standard level of service, districts are discouraged from pursuing more cost effective ways to manage their physical resources.

Respondents from small school districts do not believe that there is a relationship between district F.T.E. enrolment and the need for a full-time superintendent and secretary treasurer. All districts, regardless of size, agree that the services of full-time district officers are required. The fiscal framework Review Committee also subscribes to this conclusion.

School districts which describe themselves as "beyond Hope" feel that the fiscal framework accentuates their isolation. The fiscal framework's emphasis on F.T.E. enrolment does not adequately address the distribution of students by grade level in rural communities. Excess capacity will probably be a function of rural schools for quite some time to come. The size of the catchment area and the resulting student travel time preclude optimum utilization of many rural schools. Although consolidation arguments may make sense at the operating level, at some point, it may make more sense to keep two existing structures operating under capacity than to incur heavy capital expense to achieve minor operating budget efficiencies. Further, there is no recognition of the major economic and social contributions made by the public school system in small rural communities.

As gifted and French immersion children are streamed out of the regular classroom, and lower achievers are integrated into the regular classroom, the measures of student achievement will begin to reflect the lack of focus on the average student.

Communities with a large native population tend not to differentiate these students as special and the question arises as to why they are singled out by the fiscal framework. As federal funds for French immersion can be channeled through Functions 1 and 2, so could Department of Indian Affairs funds for Native education. The B.C. Auditor General's 1988 Annual Report notes that B.C. is the only jurisdiction in Canada that places these funds in the special education category.

Provincial service levels based on district requirements are not used in Function 6, Auxiliary Service. Under the current system, different pre-1983 health costs based on markedly different levels of health services determine district allocation. This does not seem appropriate.

The blending of average provincial teacher salaries with district averages will, by logic, leave those school districts with average teacher salaries lower than the provincial average in a better position than districts with average teacher salaries that are higher than the provincial average. That is, districts with a high proportion of senior teaching staff will receive less money to pay this more expensive work force than districts with cheaper less experienced teachers. The onus for teacher salary increases will be placed on school boards.

The relationship of the base grant to the fiscal framework and the true extent of the Province's share of operating costs needs to be understood at the school district level. The Province contributes more funds directly to operating than most participants realize. Ministry analysis of district ability to pay, ensures that most districts receive more credit than the 55% base grant. When the H.O.G. is applied, the actual provincial share averages 75%.

Until the Ministry articulates its criteria for sharable capital cost, there is little chance of school district respondents understanding the process. Until the process is understood, no evaluation of fairness can take place.

Appendix 2. A Comparison of Provincial Funding Systems

The purpose of this paper is to examine school funding mechanisms that operate throughout Canada. School funding systems vary widely across Canada, yet there are a few features that are common to most systems. They are:

1. School costs are shared between the province and the local school jurisdiction according to a cost sharing formula.
2. Provinces attempt to equalize the revenues that local school districts receive, usually by giving poorer districts relatively larger provincial grants.
3. Revenues for school expenditures are raised through property taxation and through provincial general taxation.

In most provinces separate cost sharing formulas are used to support operating and capital costs. Operating cost formulas are the most varied. Some provinces simply provide a flat per pupil grant to local school boards. Others support a percentage of a boards acceptable expenditures, determined by the provinces in a variety of ways. Often provinces supplement their basic grants with special grants for districts that experience unusually high costs not recognized in the basic grant formula (such as transportation costs in rural areas). Funding for capital projects is usually made available for projects approved by the province. The province usually supports a high level of the costs involved and may assist the local board with debt financing.

To equalize revenues that local school districts are able to generate from their taxpayers provinces usually consider the wealth of school districts in the cost sharing system. The usual measure of wealth that is used is assessed property value per pupil, as it is this base that school boards usually tax to raise their share of revenues. Some provinces recognize assessed values directly in the basic cost sharing formula, while others supplement the usual grants with "equity" or other grants to compensate districts that have a poor tax base.

To fund their share of school costs provinces rely on general revenues that they receive from such sources as income taxation, resource revenues and federal transfer payments. In some provinces, the provincial government also imposes a tax on property for school purposes, although in most provinces, only local school boards tax property for this purpose. Local boards, then rely on property taxation, provincial grants and miscellaneous revenues (from sources such as textbook rentals, cafeteria operations, etc.). In some provinces the powers of local boards to tax are restricted and they rely on local municipalities to raise the tax revenues they require.

Some provinces assist local homeowners with their school tax burden by providing them with property tax relief grants. In these instances, the actual share of school costs supported by the province is higher than the cost sharing formula would suggest.

The remainder of this paper examines how public education is funded in each province. It also examines briefly the trend in operating expenditures that each province has experienced in recent years.

British Columbia

In British Columbia the province funds 55% of approved operating budgets in each local school district. The remaining 45% is funded jointly by the province and the district. The amount the province funds of the 45% in any particular district is dependent on the local wealth of that district (as indicated by residential property values). Thus, wealthy

districts are responsible for the entire 45%, while poorer districts may be responsible for only a small portion of the 45%.

The size of approved school district budgets is determined by means of a formula that outlines service levels (e.g., number of pupils per teacher) and cost factors (e.g., teacher's salaries). Districts may exceed their approved budgets by raising supplementary amounts from their local taxpayers.

The province also shares in approved capital expenditures by providing capital cost-sharing grants to districts. The provincial share of costs is determined by the following formula: The province pays 50% for the first \$6 per \$1,000 of the district's assessed property values; 75% for the next \$6 per \$1,000 value and 90% for the balance. Districts may raise their own funds for non-sharable capital expenses.

The province provides tax relief to homeowners through the Homeowner Grant Program. Grants of \$380 (or \$630 for seniors) are applied first to school taxes and then to any other property taxes.

The province finances its share of education costs through general revenues and a province-wide tax on non-residential property. School districts fund their expenditures through miscellaneous revenues and by levying taxes on residential property owners. Overall, property taxpayers fund 50% of school expenditures while 46% are funded through general revenues. However, when provincial school tax rebates are considered, property taxpayers contribute 36% and the province 59% of costs. The remainder (about 5%) is funded by miscellaneous revenues.

Between 1978 and 1986, school operating expenditures per pupil increased 93%. In 1986, B.C. operating cost per pupil ranked 6th out of 10 provinces at \$3,779.

Alberta

Education costs in Alberta are supported by the province through a variety of grants. From a fund called the School Foundation Program Fund, the province provides local school jurisdictions with a per pupil grant (varied by grade levels of students) and other grants based on factors such as kilometers of bus transportation provided. In addition, equity grants, based on the local wealth of the jurisdiction (measured by assessment per pupil), the sparsity of students throughout the jurisdiction, and the distance of the jurisdiction from major centres, are provided by the province. The local contribution equals the portion of costs not met through provincial grants.

Approved capital projects are financed by debenture borrowing. The province shares in a portion of capital costs according to the amount of school space used by the school board and the local wealth of the school jurisdiction. Grants are paid to school boards when their debenture payments are due.

The province funds the SFPF from general revenues and from a provincially set levy on non-residential properties that is collected and remitted to the province by municipalities. Other provincial grants (including equity grants) are funded through general revenues. School boards generate their share of funds through miscellaneous revenues and through requisitions to municipalities. Municipalities in turn levy taxes on local residential and non-residential property owners to raise the required funds.

Property tax relief is provided to homeowners in the form of a tax credit paid by the province that is applied to local school taxes and other local taxes. The credit is a maximum of \$1,000 for seniors and \$200 for other homeowners.

Overall, 38% of school expenditures in Alberta are funded through property taxation (net of homeowner rebates). Provincial general revenues meet 57% of education costs, and miscellaneous revenues cover the remaining 5%. A homeowner tax rebate reduces property taxpayers' share to 35% and increases the provincial share to 60%.

Between 1978 and 1986, operating expenditures per pupil increased 126% in Alberta a rate faster than in any other province. In 1986 Alberta had the third highest per pupil operating costs in Canada, at \$4,355.

Saskatchewan

The province of Saskatchewan provides operating grants to local school divisions equal to the difference between each division's "recognized expenditures" and its "recognized revenues". The level of recognized expenditures are determined by multiplying enrolment by a per pupil allowance that varies by grade level, by geographic location (urban or rural) and by other factors to reflect legitimate differences in costs between divisions. The level of recognized revenues is determined for each division by applying a uniform but hypothetical mill rate to the assessment of each division. The province then provides a grant equal to the difference between a division's recognized expenditure level (its need) and its recognized revenue level (its ability to pay). In addition, the province may provide divisions with additional money from the Educational Development Fund for special projects. School boards must raise revenues to meet all actual expenditures that exceed provincial grants. They are free to set budgets that exceed the "recognized expenditure" level if they wish.

The province also assists divisions with approved capital expenditures. School divisions are responsible for a down payment that averages 10% of total project costs. The province is responsible for the remaining costs. The exact proportion of costs assumed by the school board is dependent on the wealth of the local division. Both the province and the school boards finance their share of capital costs through long-term borrowing.

The province funds its share of education costs out of general revenues. School boards fund their share by taxing local property owners. In 1986/87, the province funded 54% of all education spending (operating and capital), while local taxpayers funded 46%. Between 1978 and 1986, operating costs per pupil rose 117% in Saskatchewan. In 1986, Saskatchewan had the fifth highest per pupil operating costs at \$3,805.

Manitoba

In Manitoba the province provides support to local school divisions for operating costs through its Government Support to Education Programs (GSEP). Four types of grants are made: block, categorical, equalization support and guarantee support. The block grant consists of flat, per pupil grant, adjusted to reflect local circumstances such as teacher qualifications, geographic location and enrolment trends. In 1986, the grant was equal to the lesser of \$1,740 per pupil or 51% of the division's "supportable expenditures" based on the previous year's per pupil spending. Categorical grants are available to support thirteen programs such as transportation, special education and minority language programs. The equalization support grant makes up a portion of the difference between a division's "supportable expenditures" and the total of other provincial grants. The size of the equalization support grant each division receives depends on the wealth of its local tax base (i.e. assessed property values).

Guaranteed support grants are designed to ensure that school divisions do not receive less grant money in the current year than in the previous year.

School divisions may exceed the supportable expenditure level, but are responsible for raising all necessary money beyond the total of provincial grants.

The province also shares in the cost of capital projects. In 1986, the province contributed funds equivalent to 67% of overall capital costs.

The province funds the GSEP from general provincial revenues and from the proceeds of a province-wide property tax for education. In 1987, the property tax is 43.7 mills for farm and residential property and 87.4 mills for commercial property. Local school divisions tax local property owners (all classes) to meet their spending requirements that exceed provincial grants. The province provides a property tax credit for homeowners and tenants. Overall, provincial general revenues support about 74% of education costs while property owners support the remaining 23%. The remaining 3% is made up by miscellaneous revenues.

Between 1978 and 1986 operating costs per pupil increased by 125% in Manitoba. In 1986 Manitoba had the fourth highest per pupil operating costs per pupil in Canada at \$4,146.

Ontario

The province of Ontario provides operating support to local school boards through its Mill Rate Equalization Grant Plan. Grants distributed under this plan make up the difference between a district's recognized ordinary expenditures (based on a per pupil allowance) and the revenue generated for each district by a provincially set standard mill rate. In addition, the province provides a number of grants for special purposes such as technical education, small school board assistance, minority languages programs, special education, etc. School boards may spend in excess of the "recognized ordinary expenditure" level, but must generate all funds needed to meet their budgets above the level of provincial grants.

The province also shares in approved capital project costs. The provincial grant covers the capital costs that exceed revenues generated by a fixed mill rate per \$100/pupil of spending. On average, the grant meets 75% of capital costs.

The province funds its share of education costs entirely out of general revenues. Local school boards meet their share by imposing taxes on all classifications of local property owners. Ontario provides a tax credit to homeowners and tenants. The province funds approximately 53% of total education costs. Local taxpayers contribute 45% and miscellaneous revenues make up the remaining 2%. On average two thirds of the levy on local property owners supports "recognized ordinary expenditures" while one third supports spending above that level.

Between 1978 and 1986, operating costs per pupil in Ontario increased 117%. For the 1986 year, operating costs per pupil in Ontario were the second highest in Canada at costs \$4,516.

Québec

The province of Quebec funds approximately 92% of all education costs in that province. School boards are eligible for basic allocations (for youth education, adult education, administration and equipment) and for conditional supplementary and specific allocations (for particular activities undertaken). The level of these allocations are based on global per pupil amounts weighted by local teacher salaries and the grade level of pupils. In addition, grants for other functions such as pupil transportation and special education are funded by various provincial government ministries, such as Transport and Social Affairs. School boards are responsible for funding any spending beyond the level recognized for provincial grants. However, spending above the grant level is limited to an amount equal to 6% of the grant allocations unless approved by referendum. Equalization grants are provided by the province to districts below average property wealth.

Capital expenditures are cost-shared on a similar basis to operating expenditures. Annual debt service costs are funded entirely by the province. School boards must finance unapproved capital costs through the proceeds of property taxation or by re-allocating allocations made for operating costs.

In 1986/87, property taxation equalled 4.5% of total education costs and miscellaneous revenues equalled 1.9%. Provincial general revenues funded the remainder. Between 1978 and 1986, operating costs per pupil rose by 91%. as of 1986 Quebec had the highest per pupil operating costs in Canada at \$5,090.

New Brunswick

The province of New Brunswick funds 100% of education costs in that province. Local school boards administer the funds they receive and may accumulate surpluses or, with permission, incur deficits. The province determines the allocation for each district according to a per-pupil formula for such functions as teaching personnel, administration and supplies. Allocations for functions such as transportation and maintenance are based on the district's expenditure and/or allocation in the previous year. User fees are charged for, and cover the cost of operating, some ancillary programs such as driver education, extra curricular trips and cafeterias.

Capital costs are fully assumed by the Department of Supply and Services. As school buildings are the property of the province, school districts do not finance their construction and thus do not carry any capital debt.

The province funds educational expenditures out of provincial general revenues. While the provincial government does levy a tax on all property in New Brunswick the levy is not earmarked in any way for education. Thus property taxation is not used specifically to raise funds for educational purposes in New Brunswick.

Between 1978 and 1986, educational operating costs per pupil have increased 115% in New Brunswick. In 1986, New Brunswick ranked 8th out of the ten provinces in its per pupil expenditure, which was at that time \$3,273.

Nova Scotia

The responsibility for education finance in Nova Scotia is shared by the province and municipalities. School boards themselves have no taxation powers but do administer the funds they are allocated by the province and municipalities. The province provides "global" funds to school districts for three purposes: general operations, transportation and property services. The size of a district's global allocation is based on its enrolment, weighted according to factors such as pupil levels (i.e., elementary vs. secondary), high cost programs, rural vs. urban location and teacher salaries. The funds that boards receive under global allocations may be used for any purpose; surpluses are kept by the school board.

The province also provides specific purpose funds for special education and driver education, equipment and renovations programs. These grants are intended only to cover specific costs, and surpluses are returned to the province. Approved capital costs are assumed fully by the province. The province relies on recommendations made by the Formula Review Committee when it considers changes to the school funding formula. The committee is made up of representatives from the teacher's union, the school boards' association, the municipal association and the provincial government.

Municipalities are responsible for supplying school boards with the funds they require beyond the provincial grant funds. A minimum municipal contribution is established by the province which imposes a mandatory property tax rate in each municipality according to its property wealth. Municipalities may impose additional taxes on property owners to provide its school district with additional funds.

The province finances its share of educational spending out of general revenues while municipalities rely on the taxation of property to finance their share. In 1986/87, the province covered 80% of all education costs. Municipalities provided an additional 17%. Miscellaneous revenues make up the remaining 3%.

Between 1978 and 1986, operating costs per pupil increased 124% in Nova Scotia. Nova Scotia is ranked 7th in terms of per pupil operating expenses, which in 1986 was \$3,517.

Prince Edward Island

In Prince Edward Island, 100% of education costs are paid by the province. Five regional units administer the grants they receive from the province. The province allocates funds to the regional units according to a formula based on enrolment size and number of facilities. Staffing ratios are also established by a provincial formula. Additional grants are made for transportation expense, minority language programs and operating small schools. The province funds education costs out of provincial general revenues. While the provincial government does levy a province-wide property tax it is not earmarked for education in any way. The regional units may impose a levy on local property owners to support "supplementary programs" upon approval by the Ministry and a plebesite. To date, none have exercised this option. Thus, property taxation does not directly support education in Prince Edward Island.

The province provides loans to regional units for approved capital expenses. The province then provides the units with grants to cover the annual debt repayment.

Between 1978 and 1986 per pupil operating expenditures rose 100% in Prince Edward Island. In 1986 it had the second lowest per pupil expenditure in the country at \$3,117.

Newfoundland

The provincial government in Newfoundland pays for about 95% of all education costs. The remainder is paid for by funds raised by local school tax authorities. The size of government grants are determined by considering the previous year's costs and inflation. Extra assistance is available for small schools, special education programs, declining enrolment and the extra cost of operating schools in Labrador. The province funds 90% of approved capital projects.

The province funds its share of school costs out of provincial general revenues. The remaining 5% of total costs are raised by way of local property and/or poll taxes. School taxes are actually imposed by Local School Authorities, made up of school board and municipal appointees.

	Sources of Revenue 1986-87 (%)				
	Prov. Gen. Revenues*	Res. Prop. Tax +	Non-Res. Prop. Tax =	Total Prop. Tax	Misc. Revenues
B.C.	59.74	11.6	23.91	35.51	4.75
Alta.	57.0	31.1	7.0	38.1	4.9
Sask.					
Man.(1987)	73.83			22.72	3.45
Ont. (est. 1987)	53.1	24.0	21.1	45.1	1.8
Que.	93.6			4.5	1.9
NB	100.0	0.0	0.0	0.0	0.0
NS	80.4	16.5	0.0	16.5	3.1
PEI	100.0	0.0	0.0	0.0	0.0
Nfld.**	95.0			5.0	0.0

* includes provincial homeowner grant and other property tax relief schemes that operate in B.C., Man., and Ont. Tax credit programs also operate in Que. and NB but are not linked to school taxes per se, and thus are not included here.

** In Nfld., local school taxes derive from a commercial property tax and a poll tax. Between 1978 and 1986 per pupil operating expenses in Newfoundland increased 108%. Newfoundland had the lowest per pupil expenditure in 1986, at \$3,019.

SOURCE: Draft 1987 CMEC book.

Appendix 3. Questionnaire

Royal Commission on Education

S.D. Name

Interviewee

Title

Interviewer

Recorder

Date/Time

Financial accountability is an integral part of the mandate of the Royal Commission on Education. The purpose of this meeting is to obtain your views on a number of accountability issues.

We are primarily interested in the accountability loop linking resource inputs (financial, human and physical) to educational outputs. The terms efficiency, effectiveness and cost effectiveness will arise during the course of this questionnaire. We define these three terms in the following manner:

- | | |
|----------------------|---|
| Efficiency | refers to the acquisition and utilization of the appropriate quality and quantity of financial, human and physical resources at the appropriate times and at the lowest cost. |
| Effectiveness | refers to the achievement of the objectives or other intended effects of programs, operations or activities. |

Cost Effectiveness

refers to the use of financial, human and physical resources such that output is maximised for any given set of resource inputs or input is minimized for any given quantity and quality of output provided.

If your district has recently submitted any briefs or reports to the Ministry of Education relating to educational funding or financial accountability, we would be interested in receiving copies for review.

I. Introduction

The purpose of this section is to determine whether a link exists between the educational goals determined by the Ministry of Education and the educational goals determined by school districts and individual schools.

1. a. Are you familiar with the four GOALS OF STUDENT DEVELOPMENT (intellectual, vocational, social and human) contained in the document Lets Talk about Schools and the Ministry of Education's 1986/87 Annual Report? (Y/N)

(If respondent is not familiar with the goals, review definitions contained in the Annual Report.)

- b. Are these goals an appropriate starting point for establishing provincial goals for education? If not, why?
- c. Are there goals missing?
- d. Are there goals listed that should not be and if so, why?
- e. Are all of these goals of equal importance? Please explain.
- f. Which of these goals are the primary responsibility of the school system?

2. a. Are you familiar with the six ATTRIBUTES OF A QUALITY SCHOOL SYSTEM (accessibility, relevance, professionalism, management and accountability, cost-effectiveness and public expectations) as developed by the Ministry of Education? (Y/N)

(If respondent is not familiar with the attributes, review definitions as contained in the Annual Report.)

- b. Are these attributes an appropriate starting point for establishing educational goals? If not, why?
- c. Are there attributes missing?
- d. Are there attributes listed that should not be and if so, why?
- e. Are all of these attributes of equal importance?
- f. Recognizing that overlaps exist, which attributes are the responsibility of:
 - the ministry?
 - the school district?
 - the individual school?

3. a. Does your school district establish goals and annual objectives: (Y/N)
based on the Ministry's goals and attributes?
based on local determination at the school district level?
based on other criteria? (If yes, please explain.)

(Obtain copies of the district goals and objectives, if possible)

- b. Are these goals operationalized such that achievement can be measured?

4. a. Do individual schools within your district develop goals and annual objectives (Y/N)
based:
on the district's goals and objectives?
based on other criteria? (If yes, please explain.)

- b. Are these goals operationalized such that achievement can be measured?

5. Any additional comments on educational goals and objectives?

II. Structure and Process

The purpose of this section is to assess existing management systems, controls and practices at the school district level that are directed to the achievement of efficiency and effectiveness in the pursuit of the goals of the education system.

The questions address the following areas:

- organizational structure
- general administration
- financial management
- procurement and purchasing
- operations and maintenance
- personnel management

The opportunity to review your district's policies and procedures manual would be appreciated.

We will be asking you to rate your district's plans, policies, procedures and systems in terms of their impact on the district's efficiency and effectiveness. The following scale will be used:

- 1 = very negative impact
- 2 = negative impact
- 3 = neutral / no discernible impact
- 4 = positive impact
- 5 = very positive impact

A. Organizational Structure

1. What is the organizational structure of the school district?
 2. How is this organizational structure determined?
 3. How is this organizational structured reviewed?
 4. In your opinion, what is the impact of the district's organizational structure on its:
 - a) efficiency? 1 2 3 4 5
 - b) effectiveness? 1 2 3 4 5please explain:
-
-
-

B. General Administration

1. Does the district have documented plans or strategies for achieving the goals and objectives previously discussed?
 - a) short-term:
 - b) long-term:
- 2.. How are these strategies developed?
3. Are these strategies monitored and used in practice?
4. Are these strategies periodically reviewed and updated?

5. In your opinion, what is the impact of these strategies on the district's:

a) efficiency? 1 2 3 4 5

b) effectiveness? 1 2 3 4 5

please explain:

6. How are the district's general administration policies, procedures and systems developed?

7. Are these policies, procedures and systems monitored and used in practice?

8. In your opinion, what is the impact of the general administration policies, procedures and systems on the district's:

a) efficiency? 1 2 3 4 5

b) effectiveness? 1 2 3 4 5

please explain:

C. Financial Management

1. What steps are involved in the district's budget preparation process?

2. What part does the fiscal framework play in your budget process?

3. What information on financial performance is reported:
to the board? How often?
to other audiences? How often?

4. In your opinion, what impact does the process of budget preparation have on the district's:

a) efficiency? 1 2 3 4 5

b) effectiveness? 1 2 3 4 5

please explain:

5. How are the district's financial management policies, procedures and systems developed?

6. Are these policies, procedures and systems monitored and used in practice?

7. In your opinion, what is the impact of these financial management policies, procedures and systems on the district's:

a) efficiency? 1 2 3 4 5

b) effectiveness? 1 2 3 4 5

please explain:

8. Has an operational review of the district ever been conducted by an external body? Please explain.

D. Procurement and Purchasing

1. Does your district have policies, procedures and systems for procurement and purchasing?
2. How are these policies, procedures and systems developed?
3. Are these policies, procedures and systems monitored and used in practice?
4. In your opinion, what is the impact of these policies, procedures and systems for procurement and purchasing on the district's:

a) efficiency? 1 2 3 4 5

b) effectiveness? 1 2 3 4 5

please explain:

E. Operations and Maintenance

1. Does your district have policies, procedures and systems for managing physical assets?
2. How are these policies, procedures and systems developed?
3. Are these policies, procedures and systems monitored and used in practice?

4. In your opinion, what is the impact of these policies, procedures and systems for managing physical assets on the district's:

a) efficiency? 1 2 3 4 5

b) effectiveness? 1 2 3 4 5

please explain:

F. Personnel

1. Does your district have personnel management policies, procedures and systems?
2. How are these policies, procedures and systems developed?
3. Are these policies, procedures and systems monitored and used in practice?
4. Are the policies, procedures and systems perceived by the staff to be fair?
5. In your opinion, what is the impact of these policies, procedures and systems on the district's:

a) efficiency? 1 2 3 4 5

b) effectiveness? 1 2 3 4 5

please explain:

6. Any additional comments on structure and process?

III. Resource Utilization

In this section we would like to focus on the costs of providing educational programs in your district with an emphasis on provincial funding via the fiscal framework.

1. On a 1—5 scale, with 1 = very poor and 5 = very good, how would you rate the 'fairness' of the fiscal framework at determining sharable operating amounts for funding education?

Please explain:

2. On a 1—5 scale, with 1 = very poor and 5 = very good, how would you rate the 'fairness' of the province's system of establishing the base grant (i.e., the fixed percentage of the district's sharable operating amounts)?

Please explain:

3. In general, what are the strengths of the fiscal framework in meeting your district's needs?
4. In general, what are the weaknesses of the fiscal framework in meeting your district's needs?

(Skip to question 12 unless respondent shows keen interest and/or understanding of the fiscal framework)

5. With respect to function 1, do cost factors and service levels used in the fiscal framework reflect circumstances in your district?
6. With respect to function 2, do cost factors and service levels used in the fiscal framework reflect circumstances in your district?
7. With respect to function 3, do cost factors and service levels used in the fiscal framework reflect circumstances in your district?
8. With respect to function 4, do cost factors and service levels used in the fiscal framework reflect circumstances in your district?
9. With respect to function 5, do cost factors and service levels used in the fiscal framework reflect circumstances in your district?
10. With respect to function 6, do cost factors and service levels used in the fiscal framework reflect circumstances in your district?
11. With respect to function 7, do cost factors and service levels used in the fiscal framework reflect circumstances in your district?
12. How is the difference between the fiscal framework allocated costs/pupil for your district and the actual costs/pupil by the district as a whole explained?

(Skip to question 20a unless respondent shows keen interest and/or understanding of the fiscal framework)

13. How is the difference between the fiscal framework allocated costs/ pupil for your district and the actual costs/ pupil by the district for function 1 explained? (by program if appropriate)
14. How is the difference between the fiscal framework allocated costs/ pupil for your district and the actual costs/ pupil by the district for function 2 explained? (by program if appropriate)
15. How is the difference between the fiscal framework allocated costs/ pupil for your district and the actual costs/ pupil by the district for function 3 explained? (by program if appropriate)
16. How is the difference between the fiscal framework allocated costs/ pupil for your district and the actual costs/ pupil by the district for function 4 explained? (by program if appropriate)

17. How is the difference between the fiscal framework allocated costs/ pupil for your district and the actual costs/ pupil by the district for function 5 explained? (by program if appropriate)
18. How is the difference between the fiscal framework allocated costs/ pupil for your district and the actual costs/ pupil by the district for function 6 explained? (by program if appropriate)
19. How is the difference between the fiscal framework allocated costs/ pupil for your district and the actual costs/ pupil by the district for function 7 explained? (by program if appropriate)
20. On a 1—5 scale, with 1 = very poor and 5 = very good, how would you rate the 'fairness' of the ministry's formula for determining sharable capital costs? (by program if appropriate)

Please explain:

21. Any other comments on resource utilization?

IV. Effectiveness

Effectiveness in education can be defined as the extent to which the education system achieves its stated objectives or intended results.

The purpose of this section is to identify available measures of educational system outputs and to ascertain their perceived validity and reliability in measuring educational effectiveness.

1. Whatever the measures of educational effectiveness are, they must evaluate schools and districts on matters over which they have some control. School performance is related to innate ability as well as to many socioeconomic influences.
 - a. What environmental factors influence measures of school effectiveness in your district?
 - b. How can these factors be accommodated in a system that monitors school performance?
 - c. Should these factors be accommodated?
 - d. Should student achievement measures be controlled for level of ability, if so, how?
2. The following measures of educational output are currently available within the system:
 - learning assessment results
 - school marks (letter grades)
 - classroom achievement tests (CATS)
 - grade 12 examination results
 - scholarship rates (participation/achievement)
 - graduation rates
 - retention rates
 - withdrawal rates
 - attendance rates
 - class size
 - PTR

3. Please rank these measures according to the level of confidence that you feel exists re their validity and reliability as measures of educational effectiveness? (For ranking purposes, 1 = very poor and 5 = very good).

Learning assessment results:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

School marks (letter grades):

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Classroom Achievement Tests:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Grade 12 examination results:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Scholarship participation rates:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Scholarship Achievement:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Graduation rates:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Retention rates:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Withdrawal rates:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Attendance rates:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Class size:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

PTR:

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

4.
 - a. Are there additional quantitative measures that could be used to measure educational effectiveness more comprehensively?
 - b. What methods would be required to collect these measures?
 - c. What are the current plans for implementing such measures?
 - d. What are the constraints on implementing such measures?
-

5.
 - a. Do systems/procedures for monitoring and reporting the performance measures of schools in your district exist?
 - b. If not, could such procedures appropriately and reasonably be implemented?
6. Assuming systems for gathering, monitoring and reporting performance indicators exist, how should they be used?
 - a. by schools and districts as tools for self improvement?
 - b. by the ministry to compare and rank order schools and districts?
 - c. other?
7. Do district standards or targets exist for purposes of evaluating outcome measures?
8. Is it feasible to set provincial standards for performance improvement and ask districts and schools to establish their own targets and improvement strategies to help meet the provincial standards?
9. The educational system generates a number of intangible benefits. What qualitative indicators of educational effectiveness should be recognized?
10. Should school effectiveness be measured on two levels—with province-wide indicators (e.g., course enrolments and test scores) and district indicators (e.g., extracurricular participation rates or awards and recognition achieved by students, teachers or the school)?
11. Any additional comments on measuring educational effectiveness?

V. Cost Effectiveness

Efforts to relate resource inputs to performance outputs are required to permit informed responses to resource allocation questions.

The purpose of this section is to explore possible measures of cost effectiveness for the educational system.

1. Who should take the lead in measuring and reporting on cost-effectiveness?
schools?
administrators?
school boards?
Ministry?

please explain.

2. How should this information be used?
 - a. by schools and districts as tools for self improvement?
 - b. by the ministry to compare and rank order schools and districts?
 - c. other?
 3. Have efforts been made to link resource expenditures to educational outputs in the budget development process?
 4.
 - a. Are you aware of any indicators of educational cost effectiveness? Please list.
 - b. Please rank these indicators according to the level of confidence that you feel exists re their validity
-

and reliability as measures of educational cost effectiveness? (For ranking purposes, 1 = very poor and 5 = very good).

Indicator: _____

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Indicator: _____

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Indicator: _____

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Indicator: _____

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

Indicator: _____

a) validity 1 2 3 4 5

b) reliability 1 2 3 4 5

please explain:

c. Assuming these indicators do not currently exist within the system, what are the constraints on collecting, monitoring and reporting them?

5. Operating cost per pupil is an unsatisfactory measure of cost effectiveness because desired outcomes are assumed rather than measured, and variations in school district size and characteristics are not controlled.

a. Would it be meaningful to develop variance measures between a school district's fiscal framework and actual operating cost per pupil and plot these measures against existing measures of effectiveness, e.g., graduation rates, provincial exam results, etc.? (The purpose would be to derive a unique measure of a school district's perceived need for educational resources beyond those identified in the fiscal framework and to indicate whether these additional funds translate into improvements in system outcomes).

Please comment.

6. The primary purpose for measuring effectiveness/cost effectiveness is to improve effectiveness/cost effectiveness.

a. Have any specific initiatives been undertaken to improve effectiveness/cost effectiveness? (e.g., program evaluation pilot project, special education evaluation project, teacher evaluations, secondary school accreditations, etc.)

by the Ministry?

by the school district?

by the individual schools?

b. Are any systems currently in place to encourage outstanding performance and correct unacceptable performance?

c. How should effective (cost-effective) schools be recognised for their progress and achievements?

7. Any additional comments on measures of cost-effectiveness?

Appendix 4. Ministry of Education Goals and Attributes

(Excerpt from *Annual Report* for the period July 1, 1986 to June 30, 1987 Ministry of Education, Province of British Columbia.)

During 1986/87 the Ministry worked on the development of a framework to provide overall direction for the system's activities. A working model of this framework is now being refined through discussions with the various groups in the education system.

The first component in the framework is the "Image Statement of the Educated Person."

The educated person is one who is a thinking individual, capable of making independent decisions based on analysis, reason and creative thinking. The individual is curious, capable of and interested in learning, capable of acquiring and imparting information, and able to draw from a broad knowledge base. The individual appreciates and is able to contribute to creative expression. The individual is self-motivated, has a sense of self-worth, pursues excellence, strives to be physically healthy and is able to achieve satisfaction through achievement. The individual has sound interpersonal skills, morals and values, and respects others who may be different. The educated person understands the rights and responsibilities of an individual within the family, community, nation and the world and is aware of Canada's cultural heritage. The individual is flexible and has skills necessary to function in and contribute to the world of work.

The image of the educated person, prepared by the Curriculum Development Branch, attempts to describe the current and accepted beliefs about the role, or aim, of education as reflected in statements appearing in the Let's Talk About Schools discussion paper and other provincial documents. Clearly schools, parents and the community have a shared responsibility in the development of and educated society.

The four goals of education, as identified in Let's Talk About Schools, have been adopted as the second component. These goals reflect the four broad learning areas on which our schools are expected to focus.

They are:

1. **Intellectual Development** (prime responsibility of schools).
To develop the ability of individuals to analyze critically, to reason and think independently, and to acquire basic learning skills and bodies of knowledge.
To develop in individuals a lifelong appreciation of learning, a curiosity about the world around them, and a capacity for creative thought and expression.
2. **Vocational Development** (shared responsibility)
To assist in developing in individuals the means to realize their personal potential and to attain their occupational and career objectives.
To assist in developing in individuals effective work habits, a regard for the dignity of work, and the flexibility to deal with change and challenge in the workplace.
To assist in developing in individuals the sense of self-reliance, vision, and confidence vital to the creation of new opportunities for employment.
3. **Social Development** (shared responsibility)
To assist in developing in individuals an understanding concerning their relationship to the world in which they live, the role of the family in society, and their responsibilities and rights as citizens.
To assist in developing in individuals a sense of social responsibility, a tolerance and respect for the ideas and beliefs of others, and an ability to live and work with other people.

To assist in developing in individuals an appreciation for the fine arts and an awareness of the cultural heritage and values of Canadian society and broader world.

4. Human Development (shared responsibility)

To assist in developing in individuals a sense of self-worth, individualism, personal initiative, self-discipline, the importance of the pursuit of excellence, and the satisfaction gained through achievement. To assist in developing in individuals an understanding of the importance of physical health, emotional well-being and the work and leisure activities which contribute to a good quality of life.

The third component is the result of an attempt to identify desirable qualities or attributes that a quality school system should be expected to exhibit. The attributes identified emanate from a pilot project designed to develop a set of key indicators of educational progress or achievement. This work has been done jointly by the Ministry and a number of school districts.

They are:

1. Accessibility

Universality is vital to the education provided to B.C. children. It is not enough to say that places are provided in programs throughout the Province.

Real, rather than nominal, access means paying attention to the special needs of rural, gifted, handicapped, female and minority language students.

Attention does not mean conceding standards but rather exploring new methods of delivery and communication in the interests of accessibility.

2. Relevance

Excellence alone is not enough if the material taught is not current enough to catch the imagination of students and to relate what they learn through schooling to the real world as it exists now.

3. Professionalism

Quality schooling depends on the quality of its teaching force. Continuing development of teaching skills will be even more important in the years to come as teachers will have to adjust to changing student composition (e.g. more primary students) and interests (e.g. more secondary students taking mathematics and sciences). Moreover, the role model that teachers provide in the classroom and in all of the other activities they are involved in is absolutely essential.

4. Management and Accountability

The best and most well-meaning of organizations can lose their way and fail to achieve important standards if they become preoccupied with their own existence, do not monitor and assess achievements and do not account to the public. It is absolutely vital that schooling be monitored closely with the public informed on a regular basis of the strengths and weaknesses.

5. Cost-effectiveness

In a diverse society with an aging population, schooling is only one of many social responsibilities undertaken by government. Respecting the need to balance all social responsibilities and to make them all cost-effective, is a vital component of responsible government in an increasingly competitive world economy.

6. Public Expectations

In a democratic society, it is not enough to provide the best possible schooling. That schooling must be provided so that it helps to define and responds to public expectations.

Appendix 5. Structure and Process Criteria

The literature emphasizes the importance of subdividing the task of the organization into manageable, comprehensible units. All major responsibilities should be clearly assigned without significant overlap, conflict or omissions. Each staff member should have a clear concept and definition of his or her role in the organization, including duties, responsibilities, what he or she is accountable for, and to whom he or she reports. There should be an adequate organization chart and a job description for each position. The structure and process criteria include the following:

The organization should have documented overall objectives regarding the role it intends to play at least five years in the future. It should have specific objectives for at least one year ahead. The objectives of the management and professional staff should be consistent with the organization's objectives. In developing its objectives, the organization should consider all external factors such as population projections, economic projections, availability of staff, community concerns and public participation.

The organization should have specific strategic plans for reaching its long-term objectives. In order to attain the short-term objectives, there should be definite programs of work to be undertaken consisting of schedules, time limits, sequence of steps, etc. Those who will be principally responsible for implementation should have participated in establishing the plans and should have accepted them as being realistic and attainable. The assumptions on which short and long-term plans are based should have been clearly identified and should be realistic in light of current conditions, e.g. computers will become an integral part of our economy and society, and computer technology will accelerate for at least the next ten years.

Policies and procedures should cover only the most frequent recurring situations which leave an impact. They should be documented, up to date, and readily available to those whose actions are governed by them.

Standards should be established covering the quantity and quality of the results expected from the work of each department or manager. Adequate means of measuring and reporting the results achieved by each department or manager should be evident. There should be a means of evaluating the work of each department or manager by comparing results against standards. Prompt and effective action should be taken on the basis of control information received.

Critical decisions should be identified on a timely basis. Decisions should be made by those most qualified to make them. Minor and routine decisions should be delegated to as low a level as possible. Routine decisions should be covered by standard procedures and policies.

Information systems and procedures should be in place to perform essential data handling functions at lowest overall cost. They should be simple, accurate and self-checking.

The financial management criteria include the following:

- Budgets should be prepared at least once a year. Responsibility for maintaining expenses within budgeted amounts should be assigned to specific individuals. Those responsible for operating within budgeted amounts should participate in the setting of their budgets. Frequent comparisons should be made between budgeted and actual performance and reasons for variance analyzed. Where appropriate, budgeted activities should be organized on a program basis in such a way that it is possible to evaluate the performance of each program.
- The financial accounting system should be economical, flexible and consistent with accepted principles of accounting theory and practice. Accounts should be properly classified by a chart of accounts. The books of account should be balanced at least monthly. Journal entries should be adequately supported by substantiating data. The information in financial statements should be assembled in such a way that management control can be exercised

readily. Proper controls for the collection, custody and disbursement of cash should be in place. Work should be allocated so that no single individual has complete control over all the movements of cash in the organization.

- A proper program of risk management should be in place, including identification of all risks to which the district is exposed, efforts to minimize or eliminate the likelihood of loss, and insurance coverage which is reviewed annually with the help of outside advisors.
- The books should be audited by an independent auditor annually. A comprehensive audit should be conducted periodically.
- Standard and consistent procedures should exist for routine operations such as payroll. Appropriate steps should be taken to even out peaks and valleys in clerical workload and the number of clerical employees should be consistent with the work performed. Errors and omissions should be monitored and controlled. Forms, reports and clerical outputs should be evaluated periodically to determine if they are cost-effective. Essential records should be easy to retrieve from storage and adequately protected against loss.

Purchasing and procurement criteria include the following:

- The organization should have available the appropriate knowledge, technical processes, equipment and materials. The latest advances in equipment and processes should be continuously and systematically evaluated for feasibility of use. The requirements of the technology should be set down in specific operating instructions for employees, and they should be understood and followed. The organization should be aware of and use all appropriate sources in order to keep up to date with technological advances in its fields of interest.
- Equipment should be chosen after consideration of quantity, quality and variety of components, rate of output, and life cycle economy of operation. Equipment should be regularly serviced and maintained. Suitable steps should be taken to ensure maximum utilization and output, particularly from high value equipment. The organization should maintain close contact with equipment suppliers and should have up-to-date information on the latest equipment and processes available. The organization should regularly analyze new equipment and processes to determine their suitability.
- Future procurement activities should be forecast. Policies and procedures should ensure that the appropriate method of supply is used for a particular procurement transaction. Acquisition techniques should ensure that product costs do not exceed market price. Procedural costs should be minimized. Explicit policies and guidelines to ensure probity in all procurement activities should be documented and understood. These should include conflict of interest guidelines, appropriate tendering and bidding procedures, and appropriate segregations of duties and reviews of activities. There should be a formal mechanism for dealing with complaints. All qualified suppliers should have an equal opportunity to supply goods and services to the district.
- There should be an effective system of inventory control, including provisions for the disposition of obsolete inventory. Materials should be properly stored so as to minimize deterioration and waste. The system for distributing goods and services within the organization should be timely, responsive and efficient.

Operations and maintenance criteria include the following:

- The organization's physical assets, including land, buildings, vehicles and capital equipment, should be managed in an economical and efficient manner. There should be appropriate plans, controls and arrangements for the acquisition, development, operation, maintenance and disposal of physical assets. Buildings and grounds should be planned and organized so as to facilitate and not to inhibit the efficient and effective operation of the organization. Physical assets should be in compliance with all relevant codes, by-laws, licensing requirements, etc. In managing its buildings and grounds, the organization should have a formal preventive maintenance program and a system of service reports which can be compared to the program. Efforts should be made to increase efficiency through programs of energy conservation, etc.

- Buildings should be kept clean and well lighted. Repairs should be made promptly. Dangerous or hazardous conditions should be eliminated. Suitable rules regarding smoking and the use of safety equipment should be enforced where warranted. Appropriate codes and safety regulations should be observed in spirit as well as to the letter. First aid and fire equipment should be readily available and in good order, and personnel should be trained in their use. There should be programs of fire safety and, where appropriate, earthquake safety.

Personnel management criteria include the following:

- Short and long-term staffing requirements should be determined, including job specifications and descriptions of the skills and experience required to fill the positions. All present employees should meet the hiring standards now in effect. All possible sources of recruitment, including present employees, former employees, professional and trade associations, employment agencies, schools, suppliers and press advertising, should be developed. Applicants should be interviewed by at least one person skilled in personnel interviewing. References should be checked before hiring. Each new employee should be properly introduced on the first day to his or her duties, fellow workers, and organizational rules and practices. Exit interviews to determine the reasons for employees leaving should take place wherever possible.
 - Training needs should be established and training goals developed. Training should be performed by people with special aptitudes for instruction. Outside training assistance should be evaluated and used where appropriate. Each employee's competence to perform various operations should be documented. The effect of training should be evaluated in terms of reduction in turnover, reduction of errors, accidents, and by measurement of improvements in quality or quantity of production.
 - Wage scales and fringe benefits should be comparable to those of similar organizations locally, regionally and provincially. Consistent and systematic procedures should exist for measuring job values and relating such measurements to appropriate salary levels. There should be a system of merit rating for determining the basis on which wage and salary increases will be granted. There should be established written policy covering wage increases, sick leave, holidays and vacations.
 - Employees should be encouraged to take extension courses. There should be an effective suggestion and award system. The organization should support social events and recreational activities for its employees. There should be access to adequate transportation facilities. Employee insurance plans should be comparable to those offered by leading employers in the community.
 - The supervisor should maintain a good relationship with employees, achieve production targets, and meet cost and quality goals. Each supervisor should be responsible for a specific department or group of employees. Each employee should know who is his or her supervisor. All important activities should be supervised.
 - The organization should encourage and give opportunity to its staff to develop their managerial, supervisory, professional and other skills. Staff should be eager to develop their skills. There should be a program of appraisal so that training and development needs are identified.
 - Working areas should be well ventilated, sufficiently heated and, if required, sound proofed. Lighting should meet acceptable standards. Proper sanitary facilities should be provided. There should be adequate locker and lunch room facilities. Suitable protective devices such as safety goggles should be located where needed and used. An adequate first aid kit and an emergency doctor and hospital number should be located in a spot accessible and known to all.
 - There should be an up-to-date employee manual describing organizational policies, organization, regulations and procedures. Information about rates of pay, conditions of employment, hours and vacations should be readily available to all employees. There should be bulletin boards containing notices of holidays, schedule changes, announcements, and so forth. There should be a procedure for hearing and acting on complaints and grievances. Disciplinary action should follow clearly prescribed rules of procedure and should be taken when necessary. Management personnel should obey the same rules imposed on other employees.
- This completes the list of criteria.

Appendix 6. An Alternative Funding Formula

In the chapter we have made a number of recommendations that would improve the education funding formula. The main recommendations are:

- create a more stable and predictable source of provincial funding
- remove reference to collective bargaining from the formula
- retain the fiscal framework as a means of establishing relative costs
- amend the sharing ratio

In this Appendix we provide an example of how a revised formula may operate.

The underlying approach to setting the provincial operating grant would be remain essentially unchanged:

$$\text{Provincial Grant} = (\text{Recognised Cost}) - (\text{Local Contribution})$$

Step One: Determination of Recognised Cost

The recognised cost for any district is calculated from the recognised cost per pupil as follows:

$$\text{Recognised Cost} = (\text{Recognised Cost per Pupil}) \times \text{Enrolment}$$

The recognised cost per pupil in a district is derived from the average recognised cost per pupil in the province and the relative cost of delivering the core program in the district as follows:

$$\text{Recognised Cost per Pupil} = (\text{Provincial Recognised Cost per Pupil}) \times (\text{Relative Cost Factor})$$

For example, if the provincial average recognised cost per pupil is \$3,800 and the district in question has a relative cost factor of 110% (i.e. its costs are 10% above the provincial average), the recognised per pupil cost for that district would be \$3,800 + \$380 = \$4,180

The relative cost factor for each district would be derived from a calculation similar to the fiscal framework that takes into account differences in district size, dispersion, and other relevant factors, and which would change in response to the number of pupils enrolled in elementary, secondary and special needs programs.

Each year the provincial recognised cost per pupil would be increased annually at the same rate as the per capita rate of growth of the economy. Hence if provincial gross domestic product per capital increased by 5%, the recognised cost per pupil would be increased by 5%. i.e.:

$$\text{Provincial Recognised Cost per Pupil} = (\text{Provincial Recognised Cost per Pupil Last Year}) \times (\text{Growth Rate of Gross Domestic Product per Capita})$$

Step Two: Determination of the Local Contribution/Sharing-Ratio

The government would commit to funding a fixed share of recognised costs on average. For example, the government would commit to funding 75% of the recognised cost of delivering the core program in the province.:

$$\text{Average Provincial Contribution} = .75 \times (\text{Recognised Cost})$$

$$\text{Average Local Contribution} = .25 \times (\text{Recognised Cost})$$

In any district the local contribution would not be 25% but would vary according to each districts' ability to raise funds locally. This revenue raising capacity would depend on two factors: the number of residential taxpayers in the district and the assessed value of residential property in the district. The balance between the two factors would depend on the desired variation in taxes and tax rates between districts. Total reliance on assessed values per pupil would lead to a common tax rate throughout the province (a basic levy system). The more the local contribution is determined by the number of taxpayers the more uneven the tax rates but the more even the taxes paid between districts. However, the government would continue to guarantee a minimum contribution of 55%. Table A1 provides examples of the tax impact of this suggested approach to calculating the sharing ratio.

Table A1 Example of Alternative Sharing Ratio-Impact on Average Residential Taxes

District	Ave. Assd Home Value	Current taxes	Alternative Taxes		
			flat tax	fixed levy	total taxes
Vancouver	\$106902	\$514	\$150	\$314	\$464
C. Okanagan	\$62921	\$332	\$150	\$185	\$335
Abbotsford	\$62664	\$288	\$150	\$184	\$334
P. Rupert	\$54498	\$266	\$150	\$160	\$310
Kamloops	\$49928	\$285	\$150	\$147	\$297
P. George	\$47906	\$288	\$150	\$141	\$291
Cranbrook	\$47266	\$258	\$150	\$139	\$289
Golden	\$46512	\$293	\$150	\$137	\$287
Alberni	\$42761	\$235	\$150	\$126	\$276
F. Nelson	\$34517	\$273	\$150	\$101	\$251
Province	\$69127	\$353	\$150	\$203	\$353